Northern Graphite Provides Project Update

written by Raj Shah | December 13, 2018

December 12, 2018 (Source) – Northern Graphite Corporation **(TSXV: NGC) (OTCQX: NGPHF)** (the "Company") announces that G Mining Services Inc. has completed a review of the economics of the Company's Bissett Creek graphite project (the "Project" or "Bissett Creek") in order to evaluate the effect of some modifications to the flow sheet as well as changes in commodity prices, exchange rates, equipment and labor costs, and other project inputs. The review indicates an improvement in the Project's estimated net present value ("NPV") and internal rate of return ("IRR") as cost inflation has been offset by very favorable movements in the CDN/US dollar exchange rate and savings from some simplification of the flowsheet.

The Company intends to develop Bissett Creek in two phases. Phase 1 will consist of building a mine and plant capable of producing over 20,000 tonnes of graphite concentrate per annum A full Feasibility Study ("FS") was filed with respect to Phase 1 in 2012 and it was updated in 2013. Phase 2 involves doubling the plant throughput after three years of operation and increasing average annual production to 38,400 tonnes over the first 15 years of operation in order to meet the expected future growth in graphite demand. A Preliminary Economic Assessment ("PEA") encompassing both Phase 1 and Phase 2 was filed in late 2013 and is the current NI 43-101 report on the Project. It included an initial capital cost estimate of CDN$101.6 million for Phase 1 (US$81.2 million at current exchange rates).

The recent review indicates that the capital cost of Phase 1 has increased by approximately five per cent. While the cost of some equipment has declined and costs have been reduced through flow sheet modifications, other items such as the power plant have increased and civil, mechanical and electrical costs have all increased due to inflation. Operating costs are expected to be up to 20 per cent higher than the original estimate. A comprehensive metallurgical test program is currently underway at SGS Lakefield to confirm graphite recoveries, concentrate purity and flake size yield under the new flow sheet and to bring testing up to feasibility level standards. Once these results are available, the Company will determine if it would be necessary or beneficial to prepare and file a new NI 43-101 report.

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

		Sensitivity
	NI 43-101 PEA	**Analysis**
CDN/US dollar exchange rate	1.05	1.30
Graphite price (US$/t)	$1,800	$1,750
Graphite price (CDN$/t)	$1,890	$2,276
Initial capital cost (CDN$ millions)	$101.6	$106.6
Initial capital cost (US$ millions)	$96.8	$81.3
Expansion capital (CDN$ millions)	$45.2	$47.5

Sustaining capital (CDN$ millions)	$58.7	$61.5
Total capital costs (CDN$ millions)	$205.5	$215.6
Average annual production (tonnes)*	38,400	38,400
Total cash operating costs (CDN$ millions)	$507.2	$608.7
Cash operating costs (CDN$/tonne)	$695	$834
Cash operating costs (US$/tonne)	$662	$642
Pre-tax NPV (@8% – CDN$ millions)	$231.0	$304.9
After -tax NPV (@8% – CDN$ millions)	$150.0	$198.2
Pre-tax IRR (%)	26.3%	30.1%
After-tax IRR (%)	22.0%	25.0%
* Average over first 15 years		

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

Gregory Bowes, CEO, provided the following commentary on the review of Project economics, the Company's corporate strategy and current market conditions.

"We are very pleased that there has not been a substantial increase in capital and operating costs since the NI 43-101 reports were prepared and that the Project still has robust economics at current prices. The Company's strategy has always been to start with a smaller project that has a reasonable capital cost to reduce financial risk, and a realistic production level which minimizes market risk. We are fortunate to have a Project that has a very good flake size distribution and location which enables us to take this approach. Production

will then be expanded as the market grows.

“The large/XL flake nature of the deposit will allow the Company to focus on high value, high margin industrial markets, mainly in the US and Europe. While most of the attention on graphite is being generated by potential lithium ion battery and electric vehicle demand, these markets are supplied by small flake production from China and there is substantial excess capacity. Growing demand will eventually overtake supply and new western sources are needed, but in the interim it remains a very competitive market.”

More information with respect to the Project is available in the technical report entitled “Northern Graphite Corporation, Bissett Creek Project, Preliminary Economic Assessment” and the technical report entitled “NI 43-101 Technical Report – Bankable Feasibility Study of the Bissett Creek Project”, both of which are available under the Company’s profile on SEDAR at www.sedar.com and on the Company’s website.

Qualified Person

Gregory Bowes, B.Sc. MBA, P. Geo., a Qualified Person as defined under National Instrument 43-101, has reviewed and is responsible for the technical information in this news release.

About Northern Graphite

Northern Graphite is a Canadian development company with a 100% interest in the Bissett Creek graphite deposit, which is located in the southern part of Canada and relatively close to all required infrastructure. The Company has completed a full FS, a PEA which includes a Phase 2 expansion, and has secured its major mining permit. The Bissett Creek Project has a relatively low initial capital cost, a high profit margin and low marketing risk resulting from its extremely good flake size distribution

and a realistic production level that can easily be expanded when market conditions warrant.

This news release contains certain "forward-looking statements" within the meaning of applicable Canadian securities laws.Forward-looking statements and forward-looking information are frequently characterized by words such as "plan", "expect", "project", "intend", "believe", "anticipate", "estimate", "potential", "possible" and other similar words, or statements that certain events or conditions "may", "will", "could", or "should" occur. Forward-looking statements in this release include statements regarding, among others; the FS, the PEA, graphite prices, project economics, permitting, the development timeline and the graphite market.

All such forward-looking statements are based on certain assumptions and analyses made by management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of other parties to perform as agreed; social or labour unrest; changes in commodity prices; unexpected failure or inadequacy of infrastructure, the failure of exploration programs, including drilling programs, to deliver anticipated results and the failure of ongoing and contemplated studies to deliver anticipated results or results that would justify and support continued studies, development or operations. Readers are cautioned not to place undue reliance on forward-looking information or statements.

Although the forward-looking statements contained in this news release are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.

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