Northern Graphite Announces Successful Test Production of Graphene

21.07.2011 | Marketwired

OTTAWA, ONTARIO -- (Marketwire - July 21, 2011) - Northern Graphite Corporation (TSX VENTURE: NGC) is pleased to announce that graphene has been successfully made on a test basis using large flake graphite from the Company's Bissett Creek project in Northern Ontario. Northern's standard 95%C, large flake graphite was evaluated as a source material for making graphene by an eminent professor in the field at the Chinese Academy of Sciences who is doing research making graphene sheets larger than 30cm2 in size using the graphene oxide methodology. The tests indicated that graphene made from Northern's jumbo flake is superior to Chinese powder and large flake graphite in terms of size, higher electrical conductivity, lower resistance and greater transparency (see table).

Graphene size Opto-electrical properties
Graphene area
(mm2) Percent
(%) Transmittance
(%) Sheet resistance
(Ω/sq)
Chinese graphite powder (800mesh) 0.04-0.36 49 79 12000
Chinese flake graphite (32mesh) ∩╣Ñ7000 56 78 840
Northern Graphite ∩╣Ñ10000 64 81 800

To view images of the graphenes, please visit the following link:
http://media3.marketwire.com/docs/NGC_Images0721.pdf

Approximately 70% of production from the Bissett Creek property will be large flake (+80 mesh) and almost all of this will in fact be +48 mesh jumbo flake which is expected to attract premium pricing and be a better source material for the potential manufacture of graphene. The very high percentage of large flakes makes Bissett Creek unique compared to most graphite deposits worldwide which produce a blend of large, medium and small flakes, as well as a large percentage of low value -150 mesh flake and amorphous powder which are not suitable for graphene, Li ion batteries or other high end, high growth applications.

Graphite is one of only two naturally occurring forms of carbon, the other being diamonds. A graphite flake is much like a deck of cards, it consists of many thin layers stacked one on top of the other with weak bonds holding them together. Delaminating these layers to the lowest common denominator results in a one atom thick sheet of carbon with the carbon atoms arranged in a honeycomb pattern. This is graphene.

Graphene was first isolated by scientists at the University of Manchester who won the Noble Prize for Physics in 2010 for their efforts. Graphene is transparent in infra-red and visible light, flexible, and stronger than steel. It conducts heat 10 times faster than copper and can carry 1,000 times the density of electrical current of copper wire. Graphene is expected to be a revolutionary material that could change the technology of semi conductors and LCD touch screens and monitors, create super small transistors and super dense data storage, increase energy storage and solar cell efficiency, and will transform many other applications.

According to a professor at Georgia Tech University, there are nearly 200 companies, including Intel and IBM, currently involved in graphene research. In 2010 graphene was the subject of approximately 3,000 research papers and the European Union and South Korea have each recently started $1.5 billion efforts to build industrial scale, next generation display materials using graphene as a substitute for indium tin oxide(“ITO“). The world has only 5-10 years of ITO reserves remaining and prices exceed US$700,000 per tonne.

See what is possible at: http://www.youtube.com/watch?v=-YbS-YyvCl4&NR=1

About Northern Graphite Corporation

Northern Graphite Corporation (TSX VENTURE:NGC) holds a 100% interest in the Bissett Creek graphite project which is located 17kms from the Trans Canada highway between Ottawa and North Bay, Ontario. The Company is in the process of completing a bankable Final Feasibility Study and permitting with the

objective of initiating construction, subject to the results of the study and the availability of financing, in the first part of 2012.

The Graphite Market

Graphite prices have increased substantially due to the ongoing modernization of China and other emerging economies which has resulted in strong demand from traditional steel and automotive markets. In addition, new applications such as lithium ion batteries, fuel cells and nuclear power have the potential to create significant incremental demand growth. However, production and exports from China, which produces 70% of the world's graphite, are expected to decline and an export tax and a licensing system have been instituted. Both the European Union and the United States have declared graphite a supply critical mineral. With few potential development projects on the horizon, the Company is well positioned to benefit from the continued improvement in graphite demand and prices. High growth, high value graphite applications require large flake and/or high purity graphite which will represent 100% of Bissett Creek production.

Additional information on Northern Graphite Corporation can be found under the Company's profile on SEDAR at www.sedar.com and on the Company's website at www.northerngraphite.com

This press release contains forward-looking statements, which can be identified by the use of statements that include words such as “could“, “potential“, “believe“, “expect“, “anticipate“, “intend“, “plan“, “likely“, “will“ or other similar words or phrases. These statements are only current predictions and are subject to known and unknown risks, uncertainties and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from those anticipated by the forward-looking statements. The Company does not intend, and does not assume any obligation, to update forward-looking statements, whether as a result of new information, future events or otherwise, unless otherwise required by applicable securities laws. Readers should not place undue reliance on forward-looking statements.

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