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FIRST STAGE OF METALLURGICAL TEST WORK CONFIRMS PENTLANDITE WITHIN THE SULPHIDE MINERALIZATION AT MANIITSOQ

Vancouver, B.C. – March 14, 2013. North American Nickel Inc. (TSX VENTURE: NAN) (OTCBB: WSCRF) (CUSIP: 65704T 108) North American Nickel ("NAN") is pleased to announce that it has received the first results of metallurgical studies performed by SGS Canada Inc. ("SGS"). SGS, using QEMSCAN analysis on samples of mineralized drill core from NAN's 100% owned Maniitsoq Ni-Cu-Co-PGE sulphide project in southwest Greenland, has clearly identified the nickel mineralization as being pentlandite.

This is a positive first step for the metallurgy of Maniitsoq because pentlandite is the principal nickel mineral in the world's nickel sulphide camps.

On the completion of these metallurgical studies by SGS, NAN hopes to establish the macro parameters that will guide subsequent larger scale metallurgical testing of the multiple surface and near surface Ni, Cu, Co and PGM bearing sulphide prospects located within Maniitsoq's 75 km by 15 km Greenland Norite belt.

The QEMSCAN analysis is conducted in three stages with stage one now complete and stage two and three in progress and results expected in April.

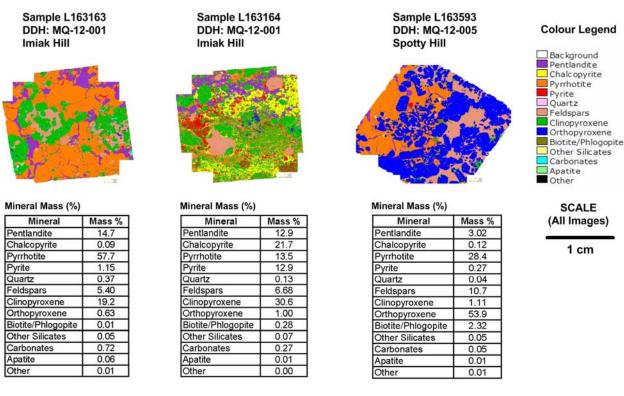
John Pattison, North American Nickel's Chief Geologist states: "Stage one, the field stitch (FS) imagery, covers only small sections of core, but the results are very encouraging as we can now confirm medium and coarse-grained pentlandite in two of the three samples. We look forward to receiving the results of the particle mineral analysis (PMA) as they will provide us with an indication of the liberation characteristics of the sulphides. While the Maniitsoq project is at a relatively early stage, it is not too early to begin investigating the metallurgical characteristics of the mineralization, as we plan for success in drilling several targets in 2013."

The three stages of the QEMSCAN analysis are:

- 1. Field stitch (FS) imagery of polished core samples to determine localized mineralogy and textures in two dimensions.
- 2. Particle mineral analysis (PMA) of larger, coarse crushed core samples to determine mineralogy, grain size distribution and spatial characterization including liberation of sulphide minerals.
- 3. Electron microprobe analysis (EMPA) for quantitative mineral chemistry to determine any solid solution including nickel in pyrrhotite and silicates.

Below are stage 1 field stitch images of polished sections made from three samples of mineralized drill core:

QEMSCAN FIELD STITCH IMAGES



Two are from the Imiak Hill zone and one from the Spotty Hill zone. These images are colour maps of the minerals in the polished sections. While the field of view is relatively narrow, they do show important textures and characteristics of the mineralization. For each image the total percent mass of each mineral species identified is listed in a table below the image.

Imiak Hill sample L163163 contains almost 15% pentlandite and the majority appears to be coarse to medium grained with lesser amounts occurring as exsolution flames in pyrrhotite.

Sample L163164 also from Imiak Hill contains a large amount of chalcopyrite in addition to pentlandite. In this sample the majority of the pentlandite is associated with chalcopyrite and is medium to coarse grained.

The upper left half of Spotty Hill sample L163593 is dominated by pyrrhotite with intercumulus orthopyroxene. Pentlandite occurs as fine grains and exsolution flames in the pyrrhotite.

Qualified Person

All technical information in this release has been reviewed by Dr. Mark Fedikow, P.Geo, who is the Qualified Person for the Company and President of North American Nickel Inc.

About QEMSCAN

QEMSCAN is an acronym for Quantitative Evaluation of Materials by Scanning Electron Microscopy. It is an automated system that it is configured to measure mineralogical variability based on chemistry at the micrometer-scale. QEMSCAN utilizes both the back-scattered electron (BSE) signal intensity as well as an Energy Dispersive X-ray (EDS) signal at each measurement point. EDS x-ray counts or spectra are used to assign mineral identities to each measurement point by comparing against a known mineral species identification program (SIP) or database. Mineral speciation, quantitative modal abundance and elemental deportment can be determined. Textural information such as core mapping, particle and mineral grain size and shape, mineral liberation, mineral associations, porosity, and matrix density can be captured and reported numerically and graphically.

About North American Nickel

North American Nickel is a mineral exploration company with 100% owned properties in Maniitsoq, Greenland, Sudbury, Ontario, and the Thompson, Manitoba nickel belt. VMS Ventures Inc. (TSX.V: VMS) owns approximately 21M shares of NAN.

The Maniitsoq property in Greenland is a Camp scale project comprising 4,983 square km covering numerous high-grade nickel-copper sulphide occurrences associated with norite and other maficultramafic intrusions of the Greenland Norite Belt (GNB). The 70 km plus long belt is situated along, and near, the southwest coast of Greenland, which is pack ice free year round.

The first two discoveries of economic mineralization at Imiak Hill and Spotty Hill confirm the high value and potential of the GNB.

The Post Creek/Halycon property in Sudbury is strategically located adjacent to the producing Podolsky copper-nickel-platinum group metal deposit of Quadra FNX Mining. The property lies along the extension of the Whistle Offset dyke structure. Such geological structures host major Ni-Cu-PGM deposits and producing mines within the Sudbury Camp.

The WIC is situated 13 km southeast of Sudbury and 1 km south of Trans-Canada Highway 17 at Wanapitei. It is an elongate 5.6 km by 2.4 km layered mafic intrusion trending northeast-southwest that comprises nickel-copper-PGE mineralized gabbro-norite and a gabbro "Injection Breccia Zone".

Statements about the Company's future expectations and all other statements in this press release other than historical facts are "forward looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and as that term defined in the Private Litigation Reform Act of 1995. The Company intends that such forward-looking statements be subject to the safe harbours created thereby. Since these statements involve risks and uncertainties and are subject to change at any time, the Company's actual results may differ materially from the expected results.

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