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MINIMUM 3,000 METER DRILL PROGRAM PLANNED FOR MANIITSOQ TO TARGET MULTIPLE HIGH PRIORITY UNTESTED VTEM CONDUCTORS & FOLLOW OPEN HIGH GRADE SULPHIDE MINERALIZATION AT SPOTTY HILL & IMIAK HILL

Vancouver, B.C. – March 20, 2013 North American Nickel Inc. (TSX VENTURE: NAN) (OTCBB: WSCRF) (CUSIP: 65704T 108) North American Nickel ("NAN") is pleased to announce that it has begun preparations for the 2013 summer drill campaign at its 100% owned Maniitsoq Ni-Cu-Co-PGE project in southwest Greenland. Fieldwork will begin in May and drilling is scheduled to begin in June. A minimum of 3,000 meters of drilling is planned.

Recent modelling of airborne and downhole EM data collected in 2012 has identified two particularly high conductance targets (Figure 1). These targets are considered very high priority because concentrated magmatic nickel copper sulphides often produce high conductance EM anomalies.

The two highly conductive anomalies are P-63, one of the VTEM targets to be tested in the southern part of the 75 km long by 15 km wide Greenland Norite Belt (GNB), and a step response type off hole conductor at Imiak Hill, down plunge of significant intersections made by NAN in 2012.

The highly prospective P-63 VTEM conductor, situated only 10 km from tide water in the southern part of the GNB, is an untested, norite-hosted anomaly that occurs along the edge of 1.5 km by 0.9 km norite intrusion (Figure 2). It has an extremely high calculated conductivity thickness of 14,880 siemens. For perspective, we can compare this to conductivity thickness at Imiak Hill and Spotty Hill, where NAN intersected significant Ni+Cu \pm Co \pm PGM mineralization in 2012:

- ➤ Imiak Hill's VTEM conductor has a conductivity thickness of 3,895 siemens and NAN drilled MQ-12-002 that returned 66.08 meters (m) @ 0.55% Ni, 0.2% Cu & 0.02% Co including 14.18 m @ 1.33% Ni, 0.38% Cu and 0.04% Co from 55.90; and
- ➤ Spotty Hill's VTEM has a conductivity thickness of 634 siemens and NAN drilled MQ-12-005 that discovered 123.94 m grading: 0.81% Ni, 0.21% Cu, 0.03% Co & 0.26 g/t Pt+Pd+Gold (Au) Including: 24.20 m @ 1.75% Ni, 0.34% Cu, 0.06% Co & 0.52 g/t Pt+Pd+Au.

The P-63 conductor is oriented at a low angle to the north-south flight lines, which are relatively widely spaced (200 m). The modeling, done by Condor Consulting of Denver, Colorado, indicates the conductor tops out 73 m below surface, is 14 m thick, with an initial strike length of 58 m and dips to the northwest for 1,057 m.

After completion of the first phase of drilling, the rig will be moved to continue delineation drilling at Imiak Hill and Spotty Hill

Imiak Hill; continue down plunge delineation drilling.

Initial drilling will be targeted on a highly conductive, step response type EM anomaly detected from hole MQ-12-003, which was drilled by NAN in 2012 (Figure 3). MQ-12-003 was drilled to test down the interpreted plunge of the mineralization intersected in MQ-12-002 (described above). The hole intersected unmineralized amphibolite at the target depth. It is believed the amphibolite is a large block of country rock, (an exotic inclusion) caught up in the Imiak Hill norite intrusion. A three component borehole

electromagnetic (BHEM) survey of MQ-12-003 detected a highly conductive, step response type conductor just south of the hole. The 2013 delineation drilling program at Imiak will begin by testing this anomaly and then continue testing the mineralized trend on 25 to 50 m centres.

> Spotty Hill; continue down plunge drilling.

Initial drilling will start from discovery hole MQ-12-005 along 25 to 50 m depth extensions (Figure 3). Each hole will be surveyed using a three component borehole electromagnetic (BHEM) survey in order to follow the conductive sulphide mineralization to greater depth. Currently mineralization has only been drilled to 145 m below surface and is open.

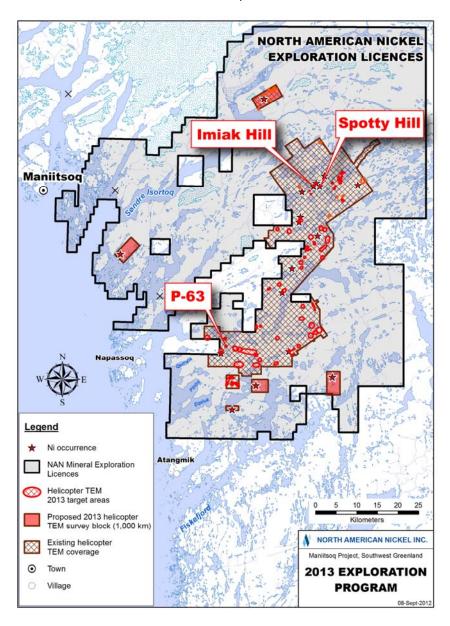


Figure 1: Map of Maniitsoq helicopter TEM targets highlighting the locations of Imiak Hill, Spotty Hill and VTEM conductor P-63.

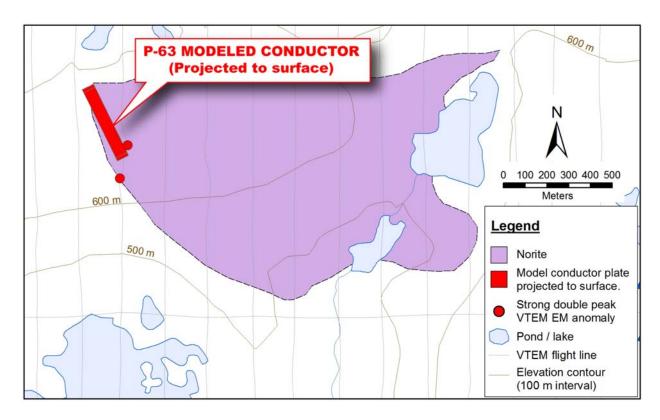


Figure 2: Map of the P-63 VTEM target area.

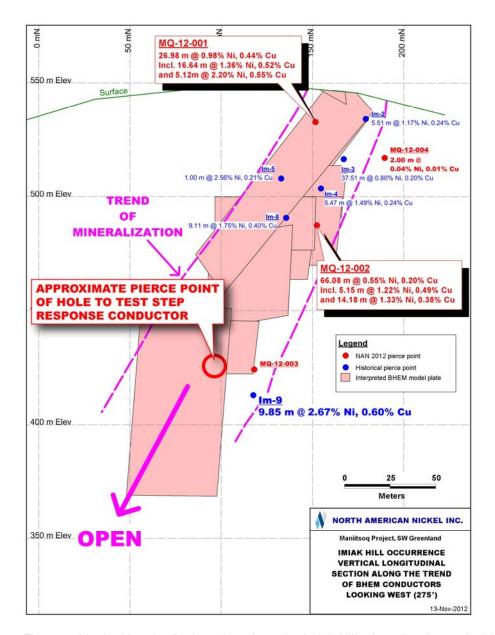


Figure 3: Vertical longitudinal section along the Imiak Hill mineralized zone looking west showing the approximate pierce point of a proposed hole to test the off hole step response EM conductor detected from hole MQ-12-003.

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 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's covering numerous high-grade nickel-copper sulphide occurrences associated with norite and other maficultramafic intrusions of the Greenland Norite Belt (GNB). The 70km 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.

For more information contact:

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