

NORTH AMERICAN NICKEL INC.

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North American Nickel Inc. Initiates InfiniTEM Deep-Looking Ground Geophysical Survey on its Post Creek Property, North Range, Sudbury Basin, Ontario

Vancouver, B.C. – June 2, 2011, North American Nickel Inc. (TSXV: "NAN"; OTCbb: "WSCRF"; CUSIP: 65704T 108) is pleased to announce the commencement of new ground geophysical surveys at its flagship Sudbury property, Post Creek. The property is located 1.5 km northeast of Quadra-FNX's producing Podolsky copper-nickel-platinum group element mine and covers the extension of the Whistle Offset Structure, which is the host rock to the Podolsky mine. North American Nickel has focused exploration on this property since acquisition and has recently completed prospecting, geophysical surveys and geochemical sampling programs.

Abitibi Geophysics will undertake an InfiniTEM ground geophysical survey on Post Creek. In preparation for the survey, a 35-km grid has been cut and chained and encapsulates all areas of exploration interest on the property. The survey will take approximately 8 days to complete and results are expected within a month of completion.

The purpose of the survey is to assess the Post Creek property at depths of up to 400 m for conductive targets associated with the Whistle Offset Structure and to compliment the results of shallow-looking geophysical surveys and prospecting activities that the Company has undertaken over the past several months. These deposits are typically very conductive and magnetic in character.

North American Nickel President and C.O.O. Mark Fedikow states "The InfiniTEM survey is designed to look deeper in key areas of the property that we have identified, but where we are unable to explore using surface based Beep Mat surveys and/or historic geophysics. We have been successful in identifying multiple geological, geophysical and geochemical drill targets near surface and now have the tool to assist us in generating deeper targets at Post Creek".

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 and Chief Operating Officer, North American Nickel Inc.

About North American Nickel

North American Nickel is a mineral exploration company with properties in the Sudbury, Ontario and Thompson, Manitoba mining camps. The Company's initial focus is on two Sudbury, Ontario properties. The Post Creek property 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, which is a major geological control for Ni-Cu-PGM mineralization. The Bell Lake property is a 256-acre property that covers approximately one kilometre of the Mystery Offset dyke or MOD. The MOD is interpreted to be an extension of the Worthington Offset dyke which is a 10 to 11 kilometre-long mineralized structure that extends from the southwest margin of the Sudbury igneous complex. The Company also has option to acquire 100% ownership in the Woods Creek and Halcyon

properties in the Sudbury area; and has acquired 100% ownership in the high-grade Ni-Cu-PGE South Bay property near Thompson, Manitoba and the large grassroots Thompson North and Cedar Lake properties, which are part of the world-class Thompson Nickel Belt in Manitoba. North American Nickel Inc. is a member of the North Shore Mining Group.

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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