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NORTH AMERICAN NICKEL ANNOUNCES THE DISCOVERY OF A SECOND QUARTZ DIORITE OFFSET DYKE ON ITS POST CREEK PROPERTY, NORTH RANGE, SUDBURY BASIN, ONTARIO

Vancouver, B.C. – August 16, 2011, North American Nickel Inc. (TSXV: “NAN”; OTCbb: “WSCRFF”; CUSIP: 65704T 108). North American Nickel (“NAN”) is pleased to announce the discovery of a second mineralized quartz diorite offset dyke within the Whistle Offset Structure on its North Range Post Creek property in Sudbury, Ontario.

President and C.O.O. Mark Fedikow states, "Continued exploration by our ground team in the immediate vicinity of our newly discovered CJ#1 offset dyke at Post Creek, has resulted in the discovery of a second Offset dyke. It occurs approximately 135 metres east of the initial CJ#1 Offset, announced in June. Prospecting and mechanical excavators have exposed additional outcrop along the trend of this new dyke which provides additional exposure to assist in the definition of drill targets for our planned September program. The new offset dyke, also discovered by NAN prospector Mr. Cecil Johnson, is now called the CJ#2 Offset."

Post Creek Whistle Offset Quartz Diorite Dyke-New Discovery, CJ#2

The CJ#2 and the CJ#1 Offset dykes are located approximately 2.8 km north of the currently producing Quadra-FNX Podolsky copper-nickel-PGE Mine and are along the projection of the Whistle Offset structure (Figure 1). Significant copper-nickel-PGM ore bodies in the Sudbury mining camp are associated with Offset dykes such as those discovered on the Post Creek property.

A small outcrop with textures and mineralogy diagnostic of offset dyke material was exposed beneath the roots of an overturned tree and observed by NAN prospector Cecil Johnson during ongoing Beep Mat magnetometer and general prospecting activities. Subsequent mechanical stripping and power washing has now exposed 100 m of the east-west trending CJ#2 offset dyke.

The association between CJ#1 and CJ#2 dykes is unknown at this time. It is conceivable that these two dykes are portions of a much larger and extensive offset dyke. Both the CJ#1 and CJ#2 dykes have similar textures and lithologic associations and both are mineralized with disseminated pyrrhotite and chalcopyrite (Figure 2).

Based on the results of Abitibi Geophysics deep-looking EM surveys, it is now recognized that the new Offset dyke, CJ#2, also has a coincident electro-magnetic anomaly and the source of this anomaly is estimated to be within 55 metres of surface. The geophysical interpretation by Abitibi Geophysics is that the EM anomaly can be attributed to “massive to semi-massive sulphide mineralization” (Figure 3).

Preliminary Geologic Interpretation of CJ#1 and CJ#2

Current interpretation of the CJ#1 and CJ#2 dykes by NAN field staff, based on recently acquired geologic information; suggest the discoveries may represent the keel of an offset dyke or the footwall expression of an embayment structure. Both dykes can be described as pods of quartz diorite associated with a broad corridor of partial melt material developed during the formation of the Sudbury Intrusive Complex (“SIC”). The localization of mineralization at, or near, constrictions in the dykes and/or abrupt changes in direction will be assessed in the near future with a drill program. It is planned for September

and will assess the CJ#1 and CJ#2 Offset dyke-associated shallow EM anomalies, including the seven InfiNITEM targets defined on the Post Creek property.

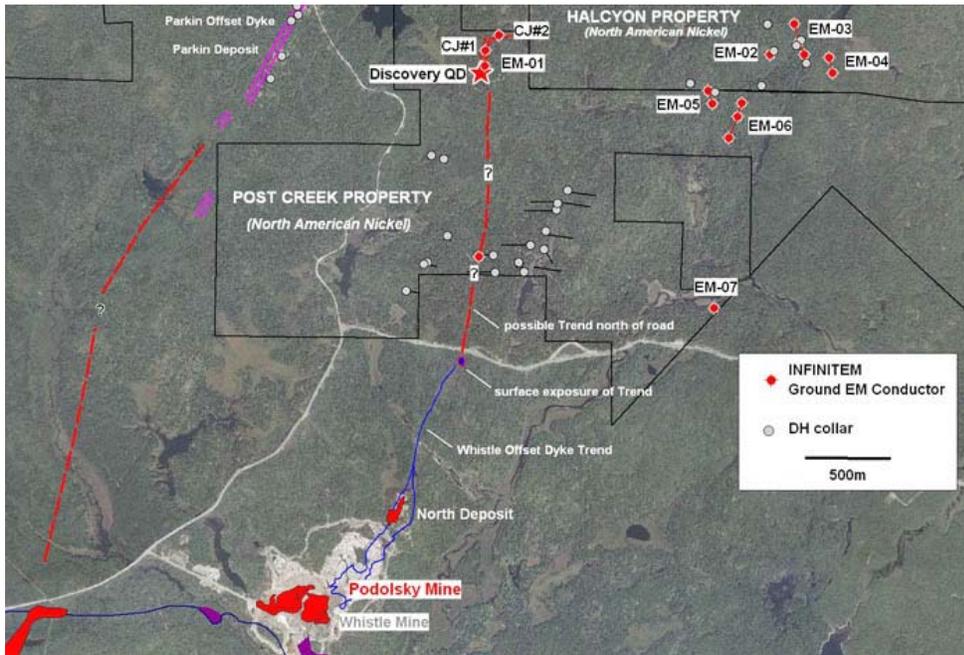


Figure 1: illustrates the association between Offset Dyke CJ#1 and CJ#2 within the interpreted extension of the Whistle Offset dyke extending from Podolsky Mine.



Figure 2: Offset dyke CJ#2 with mineralized and rusty weathered inclusion.

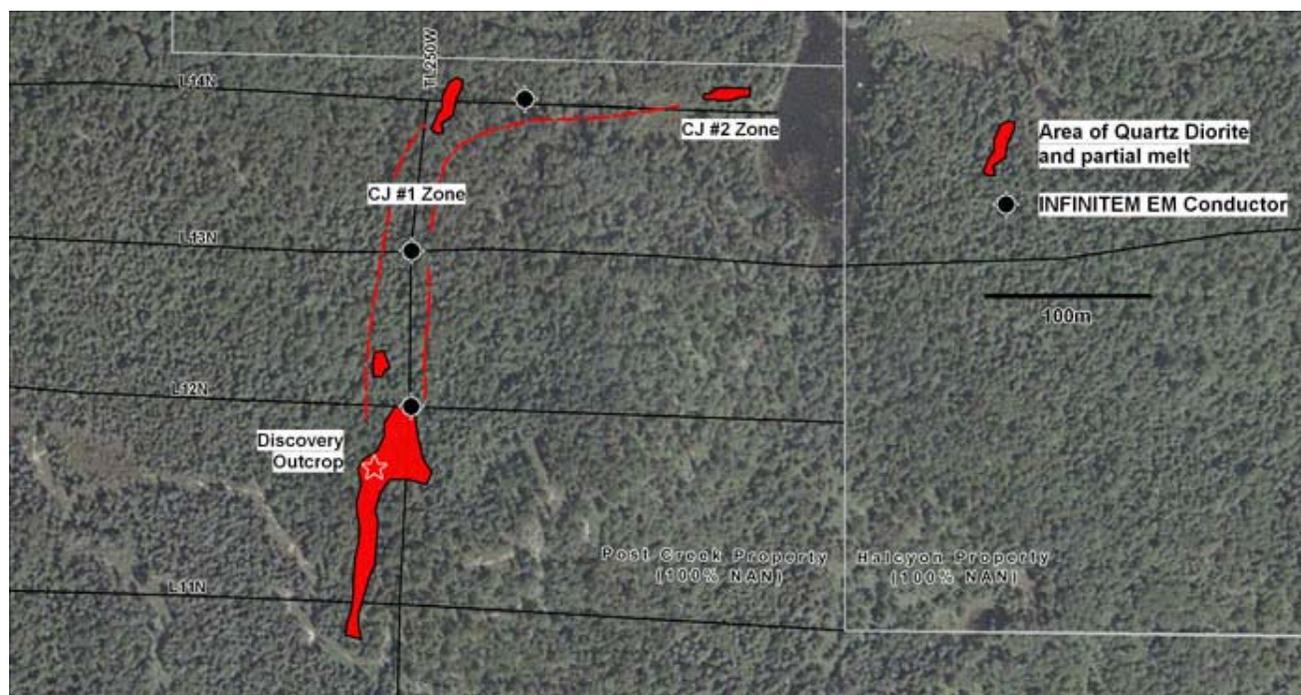


Figure 3: InfiNiTEM anomalies associated with Offset dykes CJ#1 and CJ#2.

Ongoing Exploration Work

Exploration by NAN will continue in the immediate area of the new dyke CJ#2 and will include additional stripping and power washing of outcrop and detailed geological mapping and sampling. The stripping program will also extend east and west from the CJ#2 Offset. These data will be integrated with a recently commissioned ground magnetic survey designed to cover the entire property as well as the immediate area of the CJ#1 and CJ#2 Offset dykes. Targets will be drill tested in September, 2011.

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, located off the SW corner of the SIC, 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.

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