Prepared for North American Nickel Inc.

# Report on Post Creek Property in Norman and Parkin Townships

Sudbury Mining District Longitude 80° 51′ 30″ Latitude 46° 47′ 30″

# **Table of Contents**

List of Figures	3
List of Tables	3
Summary	4
Introduction and Terms of Reference	5
Reliance on Other Experts	7
Property Description and Location	7
Accessibility, Climate, Local Resources, Infrastructure and Physiography	9
Exploration History on the Post Creek Property (PCP)	10
Geological Setting	27
Deposit Types	28
Mineralization	29
Exploration	29
Detailed Geological Observations	32
Maki Cu-Zn Occurrence Area	32
Whistle Target Area	33
Geochemistry of Rock Chip Samples	34
Drilling	37
Sampling Method and Approach	37
Sample Preparation, Analyses and Security	38
Data Verification	39
Adjacent Properties	39
Mineral Processing and Metallurgical Testing	41
Mineral Resources and Mineral Reserve Estimates	41
Other Relevant Data and Information	41
Interpretation and Conclusions	41
Recommendations	43
List of References	48
Other References	49
Date and Signature of the Author	50

# **List of Figures**

Figure 1: Location of the Post Creek Property claim blocks in Norman and Parkin Townships	7
Figure 2: Geological Survey of Canada Map (4570) covering the Post Creek Property Area, showing assumed	
faulting separating the Whistle and Parkin Offset Dykes and claims	12
Figure 3: Parkin Offset Dyke and locations of brecciated offset dyke and offshoots from the Parkin Offset Dyl	ke 13
Figure 4: Location of diamond drill holes on the PCP for 2002	14
Figure 5: Location of diamond drill holes on the PCP for 2004	14
Figure 6: Location of diamond drill holes on the PCP for 2006	15
Figure 7: Location of MMI survey transects on the PCP and the location of the Maki Zn-Cu occurrence and	
Whistle Offset target area	15
Figure 8: IP anomalies in the PCP area	16
Figure 9: Longitudinal section through the Whistle Mine in Sublayer and Podolsky Mine in the Whistle Offset	:
Dyke (Courtesy of Quadra FNX Mining). The author of this technical report has been unable to verify the	
information and that the information is not necessarily indicative of the mineralization on the property that	is
the subject of the technical report	17
Figure 10: Summary Map of exploration work in the PCP area (After Dunbar, 2005)	18
Figure 11. Google Earth image of the Whistle Offset trend line, Podolsky Cu-Au-Ni-PGM mine and strongly	
elevated Cu, Au and Ag assays, Post Creek property. Note: BX-QD refers to Sudbury breccias and volumetrical	ally
minor quartz diorite.	37
List of Tables	
Table 1: List of Claims in the Post Creek Property (PCP)	8
Table 2: Post Creek Property borehole data for 2002	20
Table 3: Highlights of geochemical data on the drilling results for 2002	
Table 4: Anomalous metals from MMI soil samples	
Table 5: Namex second phase drilling data for 2004.	22
Table 6: A summary of geochemical data on drilling in 2004 in the PCP area	24
Table 7: Spearman Correlation MMI data over the Whistle Offset target area	24
Table 8: Namex drilling in 2006 on PCP	26
Table 9: Lake bottom sediment anomalies in the PCP area	
Table 10. Detailed summary of exploration expenditures by North American Nickel on the Post Creek proper	ty.
Table 11a. Summary of multi-element rock chip analyses, Post Creek. UTM coordinates NAD83	
Table 12. Additional multi-element rock chip analyses, Post Creek.	36
Table 13. Summary of strongly elevated Cu, Au, Ag responses accompanied by low Pt and Pd, Post Creek,	
Whistle Offset Structure	36

## **Summary**

The Post Creek Property (PCP) consists of 32 claims (522 hectares) and is located in the Norman and Parkin Townships, in the northeastern part of the Sudbury Structure. The PCP is under an option agreement to the newly formed company - the North American Nickel Inc. of Vancouver.

The underlying geology of the PCP has both Precambrian basement rocks and Proterozoic volcanic rocks, metasedimentary rocks and intrusive Nipissing diabase sills. These rocks are intruded by the Offset Dykes related to the Sudbury Igneous Complex (SIC) of the Sudbury Basin. Nickel-Copper-PGE sulphide mineralization of the SIC is associated with specific rocks – Sublayer, Offset Dykes, Footwall Breccia, and Sudbury Breccia.

In Norman and Parkin Townships there are two offset dykes – the Whistle Offset Dyke stemming from the Whistle Mine of the Sublayer type, and the Parkin Offset Dyke which does not appear to have a connection to the SIC at the present erosional level. Both Dykes are mineralized. The Whistle Offset Dyke in particular, has sulphide orebodies highly enriched in copper and precious group elements or PGE's (Podolsky Mine). A continuation of the northeast- trending Whistle Offset Dyke is within a few hundred meters from the PCP area and is the primary exploration target for the North American Nickel Inc.

At this stage the North American Nickel Company has commenced exploration efforts in the PCP area; in previous year's exploration prospecting, geophysical surveys, and geochemical surveys were undertaken. Geophysical surveys give, in particular, northeast trends which are more or less on strike with the Whistle Offset Dyke located just a few hundred meters south of the PCP area. Both the geophysical and geochemical surveys have produced numerous anomalous targets. Some of these have been drilled, indicating the presence of mineralized gabbroic and volcanic rocks. In addition, prospecting discovered mineralized Footwall Breccias which, significantly enough, have been located on a northeast trend more or less on strike with the Whistle Offset dyke which is known to have associated Footwall Breccia rocks. In addition, a glacial boulder of the mineralized offset dyke type has been found in the PCP area in the vicinity of the Post Creek Lake.

Despite these highly encouraging results, particularly the identification of mineralized Footwall Breccias, the identification of the extension of the Whistle Offset Dyke itself into the PCP area remains to be established. Although assay and analytical data for rock samples received from the laboratory indicate that high-grade Cu, Au and Ag mineralization with low Ni and platinum group metals is present in outcrop along the trend of the Whistle Offset Dyke on the PCP. It is recommended, therefore, that the mineralized gabbroic rocks intersected by diamond drilling, should be re-examined and supported by petrographic studies to define more precisely their genetic kinship either to the Nipissing diabase or the Whistle Offset Dyke. This could be carried simultaneously with mapping in some detail of the projected Whistle Offset Dyke trend onto the PCP area, and excavating and power-washing some key areas with known occurrences of the mineralized Footwall Breccias, particularly associated with IP anomalies. Similar follow-up could be carried out on a number of the geochemical MMI, and geophysical magnetic-electromagnetic anomalies, to have a better understanding of these exploration targets.

Follow-up from these preliminary exploration efforts could be additional diamond drilling of the geophysical/geochemical anomalies over the Whistle Offset Dyke target(s) in the PCP area. Such drill holes

could be used to carry out a Radio-Imaging geophysical survey to locate sulphide mineralization at depths that exceed detection by the recently applied geophysical surveys.

Other than the base metal-PGE target of the offset dyke type, there is volcanogenic Cu-Zn-Pb, and Cu-Au mineralization associated with basic and felsic volcanic rocks in the area. At this time these latter types of mineralization are regarded as of secondary interest in the exploration of the PCP area.

#### **Introduction and Terms of Reference**

The newly formed *North American Nickel Inc.* or "Company" (formerly Widescope Resources Inc. of Vancouver, B.C.) has entered into an option agreement, dated April 5, 2010, with John and Marie Brady of Sudbury, Ontario, to acquire and explore two blocks of claims in Norman and Parkin Townships, Sudbury Mining Division, Ontario (see Figure 1). This block of claims is known as the Post Creek Property (PCP) and consists of 32 unpatented claims. Under this agreement the Company has the right to conduct exploration efforts on these land holdings and has agreed to pay John and Marie Brady a certain sum of money and issuing shares of the Company as outlined below.

- 1st payment to J. & M. Brady \$12,500, + issuing 400,000 common shares of the Company.
- 2nd payment to J. & M. Brady \$30,000, + issuing 300,000 common shares of the Company.
- 3rd payment to J. & M. Brady \$50,000, + issuing 300,000 common shares of the Company.
- 4th and last payment to J. & M. Brady \$50,000.

Payments are to be made on or before the Execution Agreement date on a yearly basis. The Company is obliged to incur a minimum expenditure of \$15,000 on a yearly basis. Once these conditions are met, the Company will become the sole owner of the Post Creek Property, subject to a 2.5% Net Smelter Return (2.5% NSR) payable to John and Marie Brady.

Most of the claims are in good standing till 2015, except for claim 854573 which has a due date in 2014.

The author of this report was retained by Dr. Mark Fedikow, President of the North American Nickel Inc., to assess all available data on the Post Creek Property, review exploration work carried out to date, and make recommendations for future exploration in the area. This report is designed to comply with the guidelines set out in the National Instrument 43-101, and was prepared along the format outlined in Form 43-101F1.

This project is considered to be an early stage exploration project as defined in Section 1.1 (Definitions and Interpretations) of National Instrument 43-101. There are currently no mineral resources or mineral reserves defined on the property and no proposed drilling or trenching.

I have visited the Post Creek property intermittently between June and October of 2010 with my most recent visit on October 19, 2010. Rock assays and analyses from the laboratory were received since my last visit to the property on October 19, 2010 and these results have been presented in a news release dated January 10, 2010 and included in this report. Examination of outcrop exposed with a mechanical excavator since my last property

visit and January 10, 2011 was made impossible due to heavy snow fall in the area. A property visit in Spring, 2011 is planned. This is consistent with Section 6.2 (Current Personal Inspection) of National Instrument 43-101.

Previously, I examined the geology and mineral potential of the property as a consulting geologist to Namex Explorations Inc. between the years 2002 and 2006.

Information in this report is derived from a number of sources, including published geological data and geological maps, data in the Assessment Files in the Ministry of Northern Development and Mines of Ontario, located in the Ontario Geological Survey library in Sudbury, as well as private files.

The author of this report had an opportunity to see various aspects of the developments in the PCP area over the last 10 years or so, including the geology of the area, various mineral showings, examination of some diamond drilling core, and participated in the collection of MMI samples carried out by Dr. Mark Fedikow for Namex Explorations Inc. from Montreal.

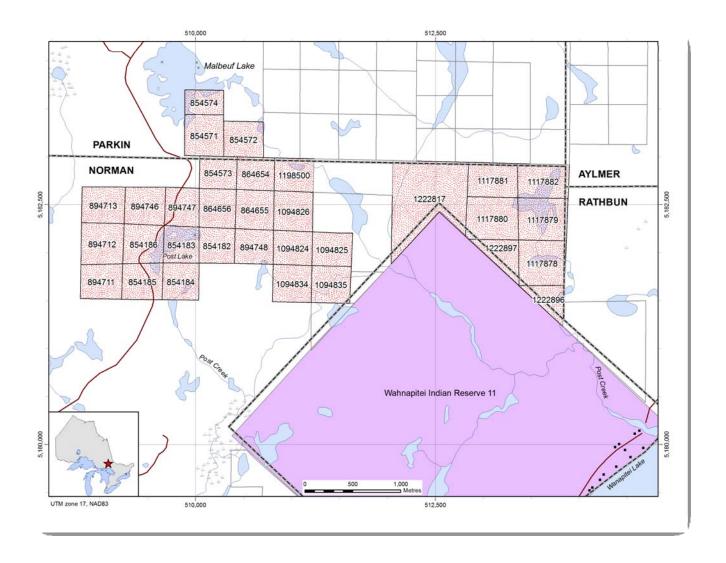


Figure 1: Location of the Post Creek Property claim blocks in Norman and Parkin Townships

# **Reliance on Other Experts**

Not applicable.

## **Property Description and Location**

The Post Creek Property (PCP) is located in the northeastern part of Norman Township, adjacent to Parkin Township which is located to the north of Norman Twp., and three claims are located in Parkin Twp. adjoining the Norman Twp. just southeast of Malbeuf Lake (see Figure 1). The PCP consists of two claim blocks: the Post

Creek Property (24 claims, or 384 hectares) and the Post Creek East Property (8 claims, about 155 hectares), (see Table 1 below). The two claim blocks are not contiguous to each other.

The Post Creek and Post Creek East properties are registered to John and Marie Brady of 1227 Holland Road, Sudbury, Ontario. The claims are located in Parkin and Norman Townships within the Sudbury Mining District.

Table 1: List of Claims in the Post Creek Property (PCP)

Location	Claims
Post Creek Property	(N) 854182, -83, -84, -85, -86
	(P) 854571, -72
<u>Legend</u>	(N) 854573
(N) = Norman Twp.	(P) 854574
(P) =Parkin Twp.	(N) 864654, -55,-56
	(N) 897711, -12, -13
	(N) 894746, -47, -48
	(N) 1094824, -25, -26
	(N) 1094834, -35
	(N) 1198500
Post Creek East	(N) 1117878, -79, -80, -81, -82
	(N) 1222817
	(N) 1222896, -97

The North American Nickel Company is obliged to spend at least \$15,000.00/year in exploration expenditures according to the option agreement with John and Marie Brady.

The boundaries of the PCP are defined by the outer perimeter of the claim blocks.

At this time there are a number of known surface copper-zinc-lead (Cu-Zn-Pb), and copper-gold (Cu-Au) sulphide occurrences associated with basic and felsic volcanic rocks which could be generally described as volcanogenic in nature. In addition, Nipissing Diabase sills in the Huronian Metasedimentary Supergroup are known to carry disseminated copper-nickel-precious group elements (Cu-Ni-PGE's) sulphide assemblages. Small occurrences of Cu-Ni-PGE sulphide are reportedly also associated with the Footwall Breccias which are clearly related to the Sudbury Igneous Complex rocks (SIC).

To keep the property in good standing the North American Nickel Company has agreed to pay John and Marie Brady annual payments and shares of the company as outlined in the Introduction.

At this time there are no known environmental liabilities on the PCP.

Permits are required once the exploration reaches the diamond drilling stage. Similarly permits are required for the excavation and power washing stage, which are in the process of being obtained at this time.

On a regional scale the area has Precambrian gneiss in contact with the Sudbury Igneous Complex, and the gneisses are overlain by a Proterozoic sequence of basic and felsic volcanic rocks and Huronian Supergroup

metasedimentary rocks intruded by Nipissing Diabase sills (see Figure 2). Both the gneisses and the volcanic-metasedimentary-diabase assemblages are cut by Sudbury Breccias.

The PCP covers the postulated north-northeast extension of the Whistle Offset Dyke stemming from the Sublayer of the Whistle Mine (former Inco mine), which has been mined out a few years ago, and which is located further south (see Figure 2). In 1970's, exploration work by Inco geologists discovered a Cu-PGE-rich mineralization in the Whistle Offset Dyke apparently stemming from the Whistle Mine further south. This newly discovered dyke was subsequently drilled in 1980's. Later, FNX Mining acquired the Whistle Offset Dyke, and carried out enough exploration work to outline an orebody, which is in production at this time and is known as the Podolsky Mine (see Figure 2, Podolsky mine is #27). The mine was named after Terry Podolsky former Vice President of Inco exploration department.

In 1980's it was generally assumed by various geologists of the Sudbury mining community that the Whistle Offset Dyke was faulted and that the Parkin Offset Dyke located in Parkin Township was an extension of the Whistle Offset Dyke. Since the Parkin Offset Dyke did not extend all the way to the contact with the Sudbury Basin, this appeared to make sense that it could be a part of the Whistle Offset Dyke. Examination, by the author of this report in early 1980's, however, of the proposed fault separating the Whistle and Parkin Offset Dykes, showed only local minor fracture zones. Such fracture zones are relatively common on the North Range of the Sudbury Structure. Besides that, south of the proposed fault structure, outcrops of the Parkin Dyke do not show any apparent displacement. Furthermore, north of the proposed fault at the Whistle Dyke there are outcrops of the Whistle Dyke rock, which do not support either the fault hypothesis separating the Whistle and Parkin Offset Dykes.

The above described observations from 1980's were very well known to the FNX Mining geologists. Hence, FNX Mining carried out a systematic beep-mat survey that eventually led to extensive stripping of overburden north of the Whistle Offset Dyke, discovering a large area of Sudbury Breccia with inclusions of what appear to be fragments of the Offset Dyke rock. This discovery gave support to the idea that the Whistle Offset Dyke may be present on the Post Creek Property located just north of the FNX Podolsky Mine property.

Since then published maps show either no fault separating the Whistle and Parkin Offset Dyke (Map 2491, OGS Sudbury Geological Compilation, 1984, by Dressler, B.O.), or a faulted separation (GSC, Sudbury Bedrock Compilation 2005, O.F.4570 Geology, D.E. Ames, A. Davidson, J.L. Buckle, and K.D. Card), (see Figure 2). On Figure 2 the Podolsky Mine is marked as 27.

# Accessibility, Climate, Local Resources, Infrastructure and Physiography

PCP area is located in Norman Township and Parkin Twps. about 10 km in the north-northeast direction from the town of Capreol in the Sudbury Basin, or about 50 km from Sudbury. Accessibility to the PCP area is very good, via paved highway 545 from Capreol to the north for about 6 km, and then by a gravel road (Portelance Rd.) going east for about five kilometers towards the Podolsky mine site, and then another kilometer N-NE towards the PCP area. A paved road leading to Indian Reserve #11, is just south of the PCP area (see Figure 1). Gravel roads are well maintained year-round in the area and are used for lumber and mining industries.

The area has a southern boreal climate with temperatures averaging about 25°C in the summer and about –10 to -15°C in the wintertime. In the summer, during the hot spells, temperatures can go up to 30°C and higher, and during winter it can drop to about -30°C for short periods of time.

Vegetation in the area is mixed, with fairly mature pine, some spruce and fir, and groves of poplar, birch and maple. In the past the area has been harvested for lumber. Old tree stumps up to several feet in diameter are still evident. Photographs from the end of 19th century to the beginning of 20th century show trees up to 10-12 feet in diameter.

Topography in the area can be described as rolling hills up to 20 m in elevation. Most of the hills are covered by some vegetation, but there are hills with good outcrop exposures. For this reason the area in the last century has been fairly well prospected, and to some extent explored in 1930's and 1940's. Low ground contains tag alders, small lakes and swampy areas.

Food, fuel and lodgings are available in small towns in the Sudbury Basin area, or in the city of Sudbury.

The area of the Greater City of Sudbury has a population of about 154,000 people. Automotive stores have supplies catering to the mining and lumbering industries of the area.

The mining industry has been active in the Sudbury Basin area since the end of the 19th century. At this time there are four companies actively involved in mining operations in the Sudbury area – Vale, XStrata Mining, Quadra-FNX Mining (formerly FNX Mining), and First Nickel Mining. Ursa Major Company is mining a low grade Ni-Cu-PGE deposit in the Nipissing Diabase in Shakespeare Township, located just west of the Sudbury Basin.

Wallbridge Mining, Champion Bear Resources and other smaller companies are actively exploring areas around the Sudbury Basin, for Cu-Ni-PGE's and gold deposits.

There is certainly plenty of expertise in the mining operations and in exploration in the Sudbury area. Sudbury is home to several Laboratories serving the needs of exploration companies, and home of the Laurentian University and the Ontario Geological Survey.

# **Exploration History on the Post Creek Property (PCP)**

Prospecting in the PCP area has been carried out probably as early as the end of the 19<sup>th</sup> century, but there is very little written record of it. There are, however, old trenches indicating that the prospectors were very active in the days gone by.

Kindle L. F. (1932) while mapping the area, reported sulphide mineralization in volcanic rocks. He outlined a zone of disseminated pyrite, pyrrhotite and minor chalcopyrite up to about 40 feet wide (about 15m), and trending in the northerly direction for several hundred feet (about 100m). It is located between the Post Creek and Post Creek East claim blocks (three patented claims, see Figure 1). Pits in this zone described by Kindle were apparently from previous prospecting work.

Discussions between J. Brady and W.V. Peredery in the early 1980's on the possible extension of the Parkin and Whistle Offset Dykes farther northeast, eventually led to the discovery of the northeast extension of the Parkin Offset Dyke all the way to the northeastern edge of Parkin Twp. by J. Brady in 1984 (see Figure 3). More or less at the same time the geological map of the Sudbury Basin was revised to include the newly discovered Whistle Offset Dyke (Map 2491, OGS 1984). On another Sudbury Basin map compiled by the GSC (2005), Map 4570, the Whistle Offset Dyke is shown as extending all the way into the southern part of the PCP (see Figure 2) and is interpreted to be faulted, so that the Parkin Offset Dyke is apparently its continuation. It should be noted, however, that although the fault is shown to be very intense (three fault lines), it is not part of a regional structure, since the faults are terminated on the eastern and western ends right at the two Offset Dykes. These faults are apparently provisory interpretations.

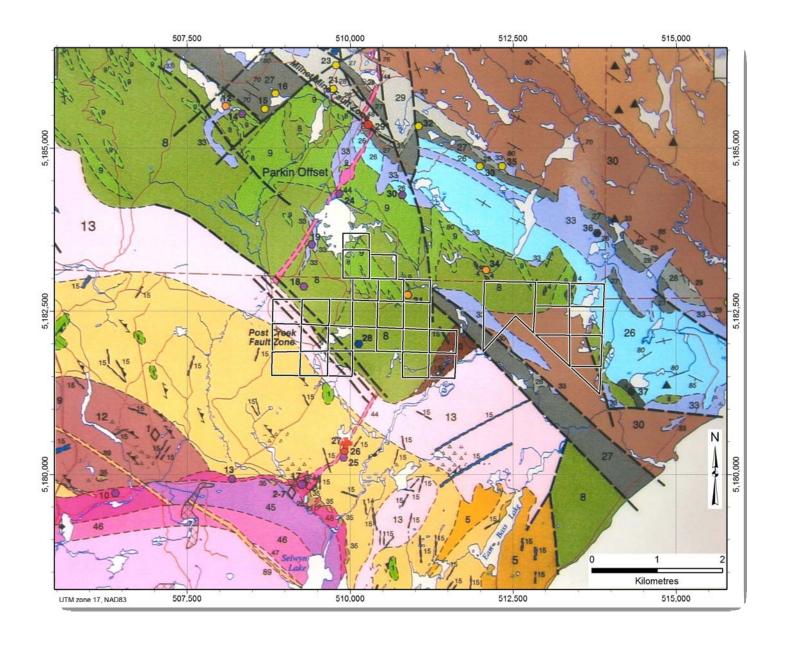


Figure 2: Geological Survey of Canada Map (4570) covering the Post Creek Property Area, showing assumed faulting separating the Whistle and Parkin Offset Dykes and claims

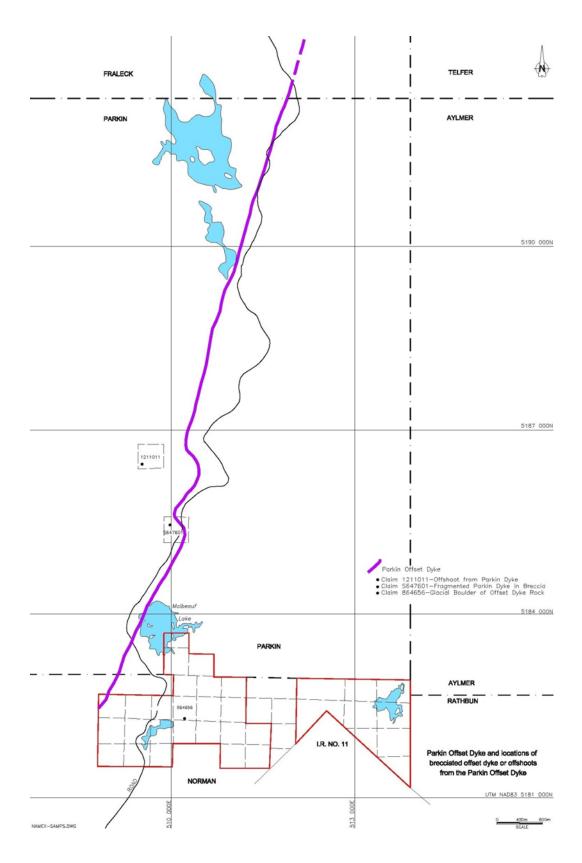


Figure 3: Parkin Offset Dyke and locations of brecciated offset dyke and offshoots from the Parkin Offset Dyke

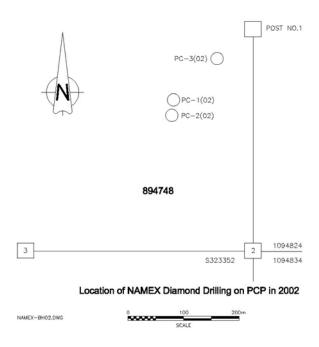


Figure 4: Location of diamond drill holes on the PCP for 2002

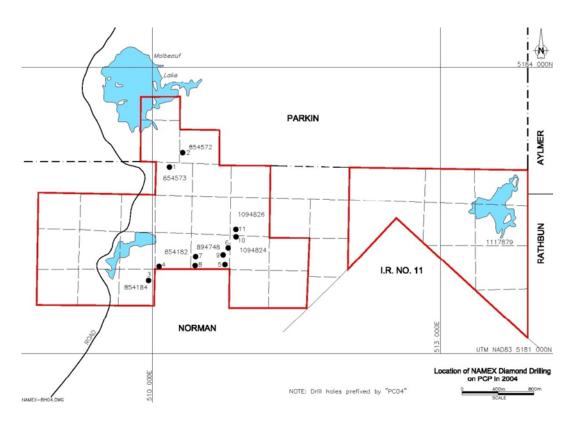


Figure 5: Location of diamond drill holes on the PCP for 2004

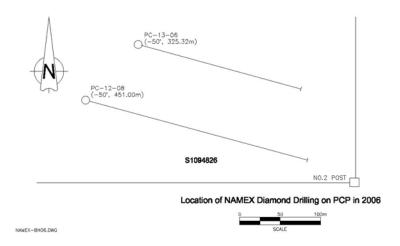


Figure 6: Location of diamond drill holes on the PCP for 2006

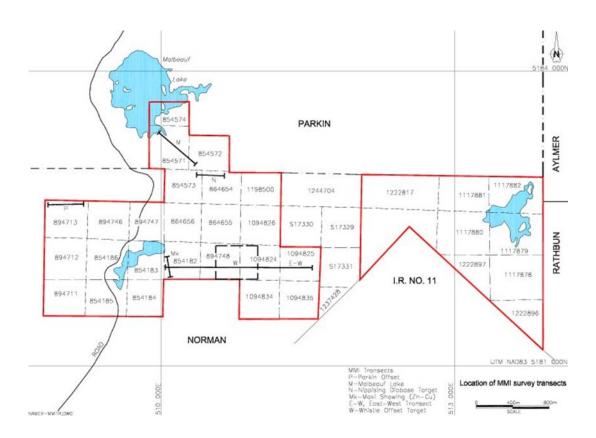


Figure 7: Location of MMI survey transects on the PCP and the location of the Maki Zn-Cu occurrence and Whistle Offset target area.

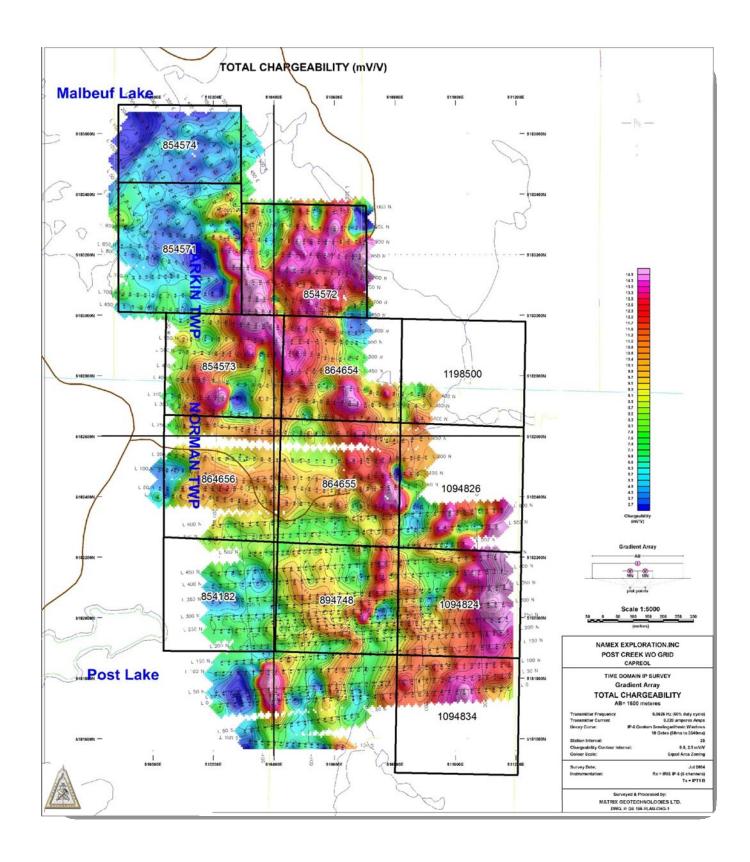


Figure 8: IP anomalies in the PCP area

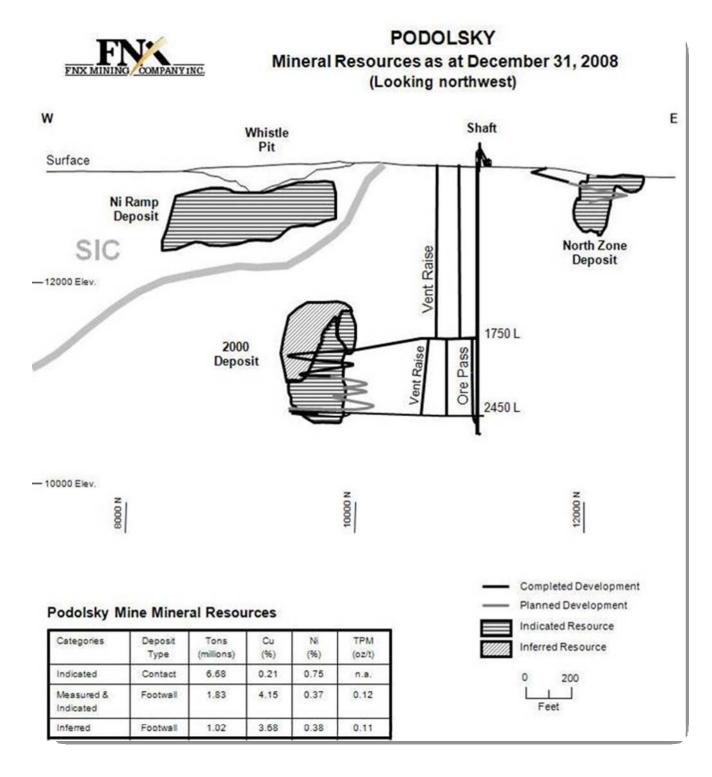


Figure 9: Longitudinal section through the Whistle Mine in Sublayer and Podolsky Mine in the Whistle Offset Dyke (Courtesy of Quadra FNX Mining). The author of this technical report has been unable to verify the information and that the information is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

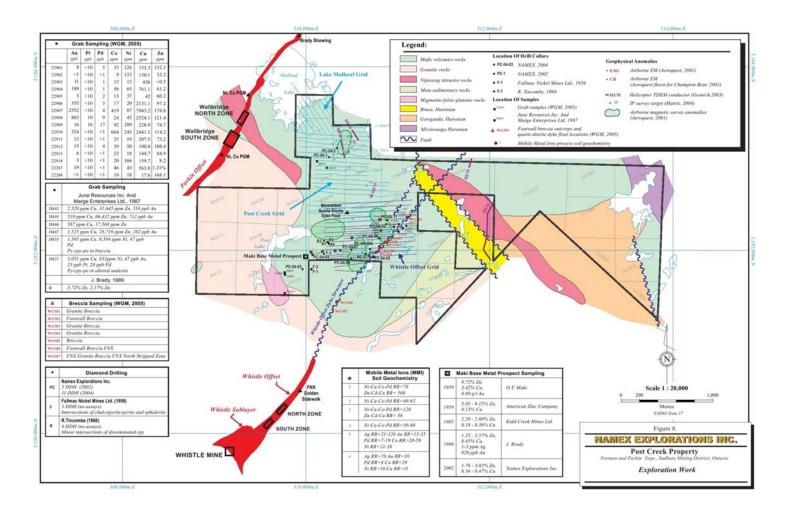


Figure 10: Summary Map of exploration work in the PCP area (After Dunbar, 2005)

Oliver Maki (1959) prospected some of the old pits located east of the Post Creek Lake (claim 854182, see Figure 1) and obtained assays up to 9.73% zinc, 3.42 % copper, and 0.69g/t gold. Later in 2004 he also found an Offset Dyke-type glacial boulder with inclusions of felsic basement rock and minor sulphide mineralization near the south side of claim 864656, about 200m NE from the Post Creek Lake (see Figure 3).

Winter (1983) reported drilling activities in 1956 by Fallmac Nickel Mines. This company drilled 3 short boreholes, which reportedly intersected some sphalerite, pyrite and chalcopyrite in silicified greenstone according to the log descriptions. One of these boreholes is located on the south side of claim 854182, and the other two boreholes are located on the FNX Mining claim just south of claim 854182 (see Figure 10)

In the same report Winter (1983) also mentioned drilling done by R. Tincome in 1968, who drilled 4 boreholes to an average depth of about 160 feet (total of 691 feet). In this case the rocks of interest are described as granitic and dioritic. These boreholes also intersected minor disseminated pyrite and chalcopyrite mineralization and are located in claim 854182 just east of the Post Creek Lake (see Figure 10).

Prospecting of the old pits and new trenches by John Brady (1989) on claims 894748, 854182, and 854184 demonstrated that the sulphide assayed up to 6590 ppm Zn, 430 ppm Cu, and 170 ppb Au in trench #1. In trench #4 sulphide mineralization yielded up to 3.72% Zn. Earlier, Winter (1983) reported similar assay values from the same area, including grab samples ranging from 1.75% to 6.64% Zn, 0.05% to 0.25% Cu, 37-732ppb Au, and 0.7-37ppm silver (Ag). These two different collections of samples from the same trenches, in a sense, corroborated the presence of anomalous values of gold, zinc and copper in the volcanic rocks.

In 1992, Inco reported drilling results from the Whistle Offset Dyke with over 56 m of Cu-PGE-rich mineralization. Assay results from Inco's intersection gave a weighted average of 3.87% Cu, 0.29% Ni and 3.02 g/t total PGE's over a total width of 56m, including nearly 10 m with 12.1% Cu, 0.19% Ni and 8.74g/t of total PGE's.

The same year, geophysical exploration work carried out by Winter (1992) on the PCP ground, included a grid of 11.2 km over nine claims, total field magnetic survey, very low frequency electromagnetic (VLF-EM) survey and an induced potential (IP) survey. Magnetic and VLF data (in total 416 station readings) indicate a general trend in volcanic strata from EW to NORTHWEST-SE. A later superimposed trend is, significantly enough, NE, and is similar to the N-NE trend of the Whistle Offset Dyke. On claim 854184 Winter reported a distinct increase in chargeability and reduced resistivity in the IP anomalies, up to 300 m in strike length and open to the northwest and southeast. This area is in the vicinity of where the drilling was carried in 1956 by Fallmac Nickel Mines, which reported zinc mineralization in silicified volcanic rocks (claim 854182), or possibly chert associated with volcanic rocks.

In 2002 Lashex geophysical exploration company carried out another magnetic and VLF surveys (R. Lashbrook, 2002) over the John Brady claims. This survey included 26.8 km of line cutting, and readings every 25 m on grid lines. From magnetic readings Lashbrook established a background value of about 57,100nT. Several magnetic anomalies were identified. The magnetic and VLF-EM surveys showed a northwest to southeast trends in the rocks and a distinct but weaker northeast trend. These observations are very similar to those described by Winter (1992).

Lashbrook recommended a ground follow-up, trenching or excavations over some of the anomalies, and diamond drilling.

In the period between 2002 and 2006, Namex Explorations Inc., of Montreal, established three exploration grids, carried out some geological work, including: prospecting and sampling of mineralized rocks, airborne magnetic TDEM, ground magnetic VLF-EM and IP surveys, Mobile Metal Ion ("MMI") soil geochemical surveys, stripping of overburden and trenching, and three diamond drill programs to advance their exploration efforts. In 2002, Namex carried out a preliminary diamond drilling program and geochemical survey over the PCP area (Fedikow, 2002). Three diamond drill holes were drilled on claim 894748 (see Figure 4). DDH PC-1 intersected andesitic and felsic volcanic rocks with minor pyritic sulphide mineralization. DDH PC-2 intersected a gabbroic weakly mineralized rock with disseminated pyrrhotite and chalcopyrite. And DDH PC-3 drilled at -60°, and 150° Az, intersected felsic and mafic volcanic rocks, a gabbroic dyke rock and Sudbury Breccia, all rocks carrying minor disseminated amounts of sulphide such as pyrite, pyrrhotite and chalcopyrite. However, in Sudbury Breccia, this borehole intersected inclusions of gabbroic rock and up to 30% sulphide consisting mainly of pyrrhotite and

minor chalcopyrite. Assay values of 8-120 ppb Au, 6-11 ppb Pt, 7-9 ppb Pd, 248-395 ppm Ni and 99-510 ppm Cu were obtained from the mineralized core. The presence of gabbroic inclusions in the Sudbury Breccia could be taken to represent either the Nipissing Diabase or the Whistle Offset Dyke rock. This remains to be established by a petrographic follow-up. Drilling data are summarized in the Table 2 below.

Table 2: Post Creek Property borehole data for 2002.

DDH	Depth	Attitude	Comments
PC-1	499ft	90º	andesitic and felsic volcanic rocks, anomalous PGE's suggest presence of gabbro
PC-2	500ft	90º	gabbro
PC-3	601ft	-60º @ 150º Az.	felsic and mafic volcanic rocks, gabbro and Sudbury Breccia "SuBx"

Geochemical data on the boreholes from 2002 drilling are summarized in the Table 3 below. Geochemical data were analyzed by the Activation Laboratories Ltd.

Table 3: Highlights of geochemical data on the drilling results for 2002.

DDH	Cu	Ni	Со	Zn	Pb	As	Au	Pt	Pd	Cr	S
	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppm	%
PC-1 (02)	257	567	54	231	288	95	30	10	8	2200	2.82
PC-2 (02)	281	500	62	238	53	54	41	11	17	1530	0.36
PC-3 (02)	510	395	144	204	48	26	120	11	12	1610	1.39

In the geochemical data there is a range of values from detection limits up to the values recorded in Table 3. It should noted that these values are indicative of three types of associations – a volcanogenic terrain with basic and felsic rocks as in PC-1, and volcanogenic terrain with a basic intrusion (PC-2), and volcanogenic terrain with basic intrusions and superimposed Sudbury Breccias (PC-3) related to the Sudbury Event.

In spite of this variable rock association, all three boreholes carry base metals and PGE's which are in the same order of magnitude in all boreholes. In addition, the chrome (Cr) values are elevated and are found in all three boreholes. For volcanic rocks in particular, the elevated Cr values are not normal. Considering that the sample preparation was carried out using a chrome-steel vessel, it is possible that the elevated chrome values are not very significant and could be due to contamination during the pulverization process.

Fedikow (2002), on the basis of these data, concluded that the Cu-Ni-PGE values are above the normal background values, and hence could possibly be related to the Sudbury Event that produced the Sudbury Structure and the associated sulphide mineralization. It should be emphasized here that the Sudbury Breccia also carries similar anomalous base metal and PGE values reinforcing Fedikow's conclusion. In addition, Fedikow noted that the preliminary MMI soil survey in the area also contained anomalous base metal and PGE values.

In 2003, Namex followed-up the drilling results of 2002, with a more extensive program of MMI soil sampling survey in the PCP area (Fedikow, 2003). Several different targets were covered using MMI soil sample surveys

with sample stations situated 25m apart. The MMI soil sample transects are listed below and their locations are given in Figure 7.

- 1. O. Maki base metal transect (anomalous Zn-Cu showings in volcanic rocks)
- 2. Malbeuf Lake
- 3. Nipissing Diabase dyke with sulphide mineralization
- 4. Parkin Offset Dyke
- 5. Magnetic anomalies A and B identified in an earlier geophysical survey
- 6. E-W 1700m transect, through the O. Maki transect and the Whistle Offset Target

Examples of anomalous metal values from soil samples from various transect areas are listed in the Table 4 below. These are the highest values reported in any given transect. As a result of this work many MMI anomalies were recognized in the PCP area, particularly over the magnetic anomaly A, where elevated values of Ni, and Pd were encountered. The East-West transect also produced elevated values in Ni, Cu, and Co in the vicinity of the magnetic anomaly A (see Figure 7, area W)

On the other hand the mineralized Nipissing Diabase produced only a relatively weak anomaly in Ni, Co, and Cu metals where the values were expected to be much higher than those obtained. Ni-Cu metals were only moderately elevated over the Parkin Offset Dyke on the west side of PCP area. Here the Parkin Offset Dyke does not have any geophysical anomalies and is probably barren or has only minor sulphide content.

The high values of Zn, Cu, and Cd in the MMI soil samples corresponded to the Maki sulphide showing in volcanic rock and to the E-W transect where it crossed the Maki showing area.

Table 4.	<b>Anomalous</b>	metals from	MMI soi	l samnles
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Transect	Ni ppb	Co ppb	Au ppb	Ag ppb	Pd ppb	Cu ppb	Zn ppb	Cd ppb	Pb ppb
Maki Showing	986	10	0.44	34.3	0.10	87	1640	45	35
Malbeuf Lake	288	10	0.29	26.1	0.19	320	1920	27	90
Nipissing Diabase	164	2	0.27	20.5	<0.1	850	879	52	85
Parkin Offset	630	5	0.13	5.91	<0.1	626	735	30	87
Mag anomaly A	2150	7	0.13	7.12	0.15	237	579	19	165
East-West Transect	2640	124	0.23	13.0	<0.1	2100	3940	91	26

Fedikow (2003) examined the MMI data and came to the conclusion that in the area of the magnetic anomaly up to seven significant locations are available for further follow-up. By comparison to anomaly A, anomaly B in the vicinity of anomaly A is relatively weak, except for Ni which is elevated.

It is of interest to note that the high anomalous Ni values in the MMI transects do not necessarily correspond to the high anomalous Pd, Au, or Ag values. The high anomalous Pd, Au and Ag values are more commonly present at stations 25-50 m further away from the stations with high Ni values.

In 2004, Namex carried out a second, more extensive, phase of diamond drilling in the PCP area (Fedikow 2005). Summarized data on drilling are presented in Table 5 below.

Table 5: Namex Explorations Inc. second phase drilling data for 2004.

DDH	Azimuth	Dip Angle	Depth	Sample #	Lithologies
PC04-1	90º	-45º	754'	93901-09	granitic gneiss, sediments, fragmental dacite, tuff, mafic dyke
PC04-2	90º	-45º	434′	93910-18	chert, granite, mafic dyke, feldspar porphyry dyke
PC04-3	100º	-55º	422'	93951-68	Felsic and intermediate volcanic, mafic volcanic
PC04-4	100º	-55º	422'	93969-75	ditto
PC04-5	100º	-55º	622'	93976-86	ditto
PC04-6	100º	-55º	644'	93987-90	rhyolite, lapilli tuff, mafic volcanic, granite
PC04-7	270º	-60º	285m	57951	rhyolite, basalt, gabbro, sediments, feldspar porphyry
PC04-8	270º	-60º	345m	57952-69	sediments, rhyolite-dacite, feldspar porphyry dyke
PC04-9	270º	-45º	279m	57970-77	sediments, basalt, gabbro
PC04-10	270º	-45º	306m	57978-99	sediments, basalt, tuff, gabbro, SuBx
PC04-11	270º	-45º	279m	99701-09	sediments, basalt, tuff, rhyolite, gabbro, SuBx

Borehole depths in the original data were recorded in feet (') and in meters as indicated above. In total there were 8199 ft drilled in 2004. See Figure 5 for the locations of DDH's PC04-1, -11. A summary of the assay results from these boreholes is given in Table 6.

Three areas were drilled.

**Area 1:** DDH PC04-1, 02. These boreholes tested IP and MMI anomalies on claims 854571 and 854572 located just southeast of Malbeuf Lake. They intersected up to 5% disseminated pyrite in siliceous metasedimentary rocks. Assays gave anomalous gold values (up to 140 ppb). Pyrite content explained the chargeability response in the IP anomaly. Anomalous Pb in MMI samples was explained by galena veinlets and lensoidal masses in gabbro found in the pits.

**Area 2:** DDH PC04-3, -4. These boreholes tested the Maki Zn-Cu occurrence located in claims 854184 and 854182 just southeast of the Post Creek Lake. They intersected a 60 foot interval of mineralized material in silicified mafic volcanic rocks. PC04-03 assays of mineralized rock showed enrichment in Cu and Au, whereas PC04-04 showed enrichment in Zn.

**Area 3:** The Whistle Offset target is located in claims 894748, 1094824, 864635 and 1094826. Drilling results fall into two different categories:

- I. IP and magnetic anomalies. Drilling intersected mineralized rocks described as mafic and felsic volcanic rocks. Sulphide grading up to 5011 ppb (5.01g/t) Au are associated with high copper values up to 0.68% (see PC04-10, and PC04-09). Sulphide grading up to 1% Zn occur in the same environment (PC04-10). Such sulphide usually has low Ni (35-50ppm) and low Co (25-60ppm) values. Pt and Pd values are either below the detection limit (Pt <10ppb, Pd <1ppb) or just above the detection limit for Pd (1-4ppb).
- II. IP and MMI anomalies. Drilling intersected a number of highly anomalous values in Ni and Cu (see PC04-5, -6, -8,-10) associated with gabbroic rocks. Ni values range from about 100 ppm to about 841 ppm, whereas the copper from the same samples ranges from about 360 ppm to about 4800 ppm. Co in these samples ranges from about 70 to about 200 ppm. Pt and Pd show a distinct increase in their values by comparison to those in category I. Pt values, particularly in PC04-6, range from 11 to 34 ppb, and Pd values range from 1 to 53 ppb.

A number of comments on the data in Table 6 can be made. In DDH's PC04-3,-4,-10,-11 there is a definite enrichment in Cu-Zn-Au-Ag-Pb, showing a volcanogenic massive sulphide or VMS type of association, with anomalous Cd and As values. Gold intersection in PC04-10 was over 5g/t. Anomalous W, Li and Mo values are indicative of the presence of **alkaline granitic** rocks. Granitic rocks were intersected and logged in these DDH's. The presence of anomalous Pd (10-11 ppb) also points to the presence of gabbroic rocks intersected in these DDH's.

In DDH PC04-9 anomalous gold is associated with anomalous copper, and only minor zinc. Arsenic is also present.

In DDH's PC04-3,-4, -5,-6,-7,-8,-9 there is an enrichment in Ni-Cu-Co-Au-Pd metals indicative of a gabbroic rock association. DDH PC04-6 has a highly anomalous Pt value (34ppb). Minor Bi is also present.

An unusual feature has been noted in DDH PC04-8. Here geochemical data indicate that the sodium content for most of the samples is <0.01% Na, and chromium (Cr) values are elevated (up to 1530ppm), usually indicative of ultramafic rocks. In this DDH the arsenic (As) values are also elevated (up to 148ppm).

From the above description and data in Table 6, it is clear that there is a mixture of two different metallogenic sources of metals.

- 1. volcanogenic massive sulphide or VMS (Cu-Zn-Pb) environment.
- 2. base metal-PGE association (Ni-Cu-Co-Au-Pd-Pt).

Whether the base metal-PGE association in the PCP area is related to the Sudbury Impact Event or the Nipissing Diabase magmatic event remains to be resolved, since both carry similar base metal-PGE sulphide assemblages.

In addition, Namex reported in a press release dated Sept. 28, 2004, a highly anomalous PGE-base metal occurrence in a Footwall Breccia type of rock, more or less on strike with the Whistle Offset Dyke. Rock chip sample #99636 assayed 171 ppb Au, 2241 ppb Pt, 1051 ppb Pd, 8330 ppm Ni, 7368 ppm Cu and 675 ppm Co. The most significant part of this press release is the identification of the rock type as a Footwall Breccia. Of

course, the base metal and the PGE contents are also very significant. Footwall breccias are commonly associated with the Sudbury Sublayer rocks or less commonly with the offset dykes as in the Whistle Offset Dyke case. Hence, the identification of a well-mineralized Footwall Breccia is the best indication that this area is affiliated with the Sudbury Structure, and the Whistle Offset Dyke.

Table 6: A summary of geochemical data on drilling in 2004 in the PCP area.

8	Cu ppm	Ni ppm	Co ppm	Au ppb	Ag ppb	Pt ppb	Pd ppb	Cr ppm	Zn ppm	Pb ppm	Cd ppm	W ppm	Bi ppm	Mo ppm	As ppm	Li ppm
PC04-1	34-272	42-108	14-40	<1-30		<10	<1-2	113-214							-	
PC04-2	31-70	54-79	13-25	<1-9		<10	<1-2	48-144								
PC04-3	8.3-5517	10-236	4-100	<1-140	<2-5.9	<10	<1-10	58-462	17-3424	<2-163	<1-8	<10-30	<5-8	<1-3	<3-10	<1-23
PC04-4	7.6-563	26-112	13-61	4.0-22	<2-0.4	<10	<1-11	60-100	50-443	<2-14	<1-16	<10-36	<5-6	<1	<3-17	14-24
PC04-5	6.6-355	15-972	8.0-67	<1-51	<2-0.4	<10	<1-8	83-368	15-127	<2-57	<1	<10	<5-5	<1-2	<3-34	4.0-23
PC04-6	428-4818	94-833	64-127	13-181	0.6-2.1	<10-34	2.0-53	63-135	59-125	5.0-25	<1-1	<10-56	<5	2.0-14	<3-71	6.0-18
PC04-7	112-2849	39-145	30-32	61-283	3.5-4	<10	2.0-3	170-428	97-141	10.0-16	<1-1	<10	<5	2.0-5	4.0-7	20-21
PC04-8	9.2-937	261-841	48-169	<1-26	<2-0.9	<10	1.0-9	852-1539	19.6-97	<2-53	<1-1	<10	<5	<1-2	11.0-148	3.0-11
PC04-9	478-6846	16-35	15-57	23-365	0.4-1.8	<10	<1	30-43	15-30	<2-6	<1	<10	<5	<1-2	5.0-29	<1-2
PC04-10	132-973	41-626	27-214	59-5011	<2-0.9	<10	<1-3	56-474	56-1%	<2-167	<1-30	<10	<5-17	1.0-4	<3-38	<1-77
PC04-11	151-341	65-104	26-59	20-1047	<2-1.7	<10	<1-4	66-266	35-1110	<2-390	<1-5	<10	<5-8	<1-10	<3-8	2.0-25

Another MMI survey over the Whistle Offset target in the PCP area was carried out in 2004 (Fedikow, 2005). A total of 745 samples were collected at 25 m intervals along traverses. Fedikow recalculated the data into Response Ratios (RR) using the lower quartile of the data as a base, so that the data were categorized into low contrast (RR <20), moderate contrast (RR 20-50) and high contrast domains (RR >50). On the basis of these ratios a number of anomalous areas became evident.

In addition Fedikow examined the data using a Spearman-Rank Correlation Coefficient matrix that clearly showed two-metal coupling geochemical features as listed in the Table 7 below:

Table 7: Spearman Correlation MMI data over the Whistle Offset target area

Metal Coupling	Spearman Rank Correlation
Zn-Cd	0.720
Cu-Zn	0.362
Cu-Cd	0.428
Cu-Pb	0.436
Ni-Ag	0.407
Ni-Co	0.380
Au-Pd	0.210

These data clearly show two different metal associations. One is typical of the volcanogenic sulphide (Zn-Cu-Pb-Cd) or volcanogenic massive sulphide (VMS), and the other is the base metal-PGE association (Ni-Co-Au-Pd) typical of gabbroic rocks.

Since acquiring the property in 2010 North American Nickel Inc. has undertaken detailed geological outcrop mapping based on new exposures created with an excavator, geochemical sampling of rock exposures and bedrock in the vicinity of beep mat conductance anomalies, soil geochemical surveys (Mobile Metal Ions) and general prospecting.

Fedikow made a number of recommendations for future exploration follow-up based on a number of anomalies from the MMI geochemical surveys in the PCP area.

The above described MMI survey exploration work was followed-up by an IP/resistivity survey carried out by Matrix GeoTechnologies Ltd. for Namex over the Whistle Offset target in PCP area, during June 22-July 30, 2004, (Kallfa and Kapllani, 2004). The gradient array that was used was capable of investigating down to a 400 m depth range, with high resolution. The pole-dipole arrays gave capabilities to investigate 25-150 m depth ranges. The area surveyed was about 0.7 square km, with 27.5 km of lines. Readings were taken on stations 25 m apart, on 19 lines spaced 25-50 m apart.

Three varieties of anomalies associated with volcanic rocks were identified and categorized:

- I. High chargeability anomalies relative to the conductive host rock, interpreted as possibly representing massive to stringer sulphide associated with Iron Formation type of rock, or sulphide mineralization associated with highly sheared zones.
- II. High chargeability anomalies associated with near contact environments, such as carbonatized shear zones in volcanic rocks.
- III. High chargeability anomalies in high resistivity host rocks along quartz/carbonate alteration zones.

Many of the anomalies have northwesterly trends, but some have northeasterly trends.

The northwesterly trends are associated with volcanic rocks, whereas the northeasterly trending anomalies are cross-cutting the volcanic rocks, and are about on strike with the Whistle Offset Dyke located a few hundred meters further south. See Figure 8 which illustrates the chargeability results of this geophysical survey. At this time these are the best exploration targets for the Whistle Offset Dyke in the PCP area.

Three northeasterly trending zones are recognized. These are located in claims 894748, 1094824, 864655, 1094826 and 1198500 (see Figure 8).

The western zone, in claim 894748, is located on its western side, is weakly developed and is of limited northeasterly extent.

The middle zone, in claim 894748, is on its eastern side. It has an apparent interruption on its south side, and extends towards post #1 of that claim. It was investigated by drilling in 2002 and 2004. This zone apparently extends further north along the eastern boundary of claim 86465 and then into claim 1198500. However, in claim 1094826 there is another northeasterly trending zone that looks like a bifurcating structure starting from claim 894748 post #1 area. The eastern zone is in claim 1094824. It is weakly defined and was not followed—up by any exploration drilling in the past. It has, however, a number of IP targets that were not drilled.

Considering the distribution pattern and the width of these anomalies, the borehole coverage of these anomalies investigated only a narrow swath of the Whistle Offset Dyke target area. The drilling pattern in previous years was apparently aimed at specific IP anomalies.

In retrospect, a fence of boreholes across the Whistle Offset target area would have been a better exploration approach. It would have given a complete section of rocks present in the Whistle Offset target area which would have aided in the proper identification of the potential Whistle Offset dyke in the PCP area.

It is estimated, that in total, there are about 2 km of northeasterly trending zones in the PCP area. Less than half of these zones have been investigated by some diamond drilling, mainly in 2004.

A number of Quantitative Sections interpreted by Kallfa and Kapllani (2004) as possibly containing Whistle Offset type of target were recognized. These are listed below:

L. 0+55N

L. 1+00N

L. 2+00N

L. 4+00N

L. 4+50N

In addition numerous other varieties of targets have been identified and listed in a Table format in the report by Kallfa and Kapllani (see p. 20; 2004).

Some of these proposed targets were drilled by Namex in 2006 (Giblin, 2007). Specifically two boreholes were drilled on claim S.1094826 (see Figure 6 for location of these DDH's), for a total of 776.32m (2,546.3 ft). Data related to these boreholes are given in Table 8 below. The two boreholes apparently drilled the bifurcating structure described above.

Table 8: Namex Explorations Inc. drilling in 2006 on PCP.

DDH	Azimuth	Dip Angle	Depth	Lithologies	Au g/t	Pd g/t
PC-12-06	105º	-50º	451.00m	wacke, gabbro, Sudbury Breccia, mafic volcanic rocks	.0103	up to .02
PC-13-06	105º	-50º	325.32m	ditto		

As in the previous diamond drilling program in 2004, both boreholes in 2006 also intersected gabbroic rocks. Whether they are genetically related to the Nipissing magmatic event or to the Whistle Offset Dyke remains to be determined. Both boreholes gave only weakly anomalous values in Ni, Cu, Au and Pd.

It is noteworthy that the lake bottom sediments in the PCP area are reported to carry anomalous base metals and PGE's (Dyer *et al*, 2004). Sample #253 is from the northern side of the Post Creek Lake, and sample # 254 is from a small lake about half a kilometer east-southeast from the Post Creek Lake (see Table 9).

Table 9: Lake bottom sediment anomalies in the PCP area.

Sample #	Cu	Ni	Со	Pt	Pd	Ag	Zn	Pb	As	Cr
	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm
253	66	22	3.91	<0.3	1.2	0.03	75	1.95	1.5	36
254	154	32	5.88	2.0	3.9	0.17	48	11.63	4.4	37

The anomalous Cu and PGE values in the lake bottom sediments and the low Ni values are analogous to the sulphide-type of mineralization found in the Podolsky deposit in the Whistle Offset Dyke where the Cu and PGE contents are high and the Ni content is relatively low.

Most of the pertinent exploration data on the PCP area are summarized in Figure 10. These include:

- 1. Historical boreholes drilled in the PCP area.
- 2. Prospecting samples.
- 3. Geophysical survey coverage.
- 4. Geochemical MMI-type soil sampling results.
- 5. Specific IP anomalies.
- 6. Location of Footwall Breccia occurrences.

## **Geological Setting**

On a regional scale the Sudbury Structure is superimposed on the Archean and Proterozoic rocks. The Archean rocks are comprised of felsic gneisses, small inliers of greenstone and small anorthositic plutons with minor mafic and ultramafic components. The overlying Proterozoic pile in the lower part has locally developed basic and felsic volcanic rocks which are overlain by the sedimentary Huronian Supergroup consisting of greywacke, limestone, conglomerate, sandstone and siliceous sedimentary rocks. All of these rocks are intruded by the Nipissing Diabase magmatic event (2.2Ga). Peripheral to the Sudbury Basin the Nipissing Diabase sills commonly carry disseminated and irregular massive sulphide segregations consisting of Cu-Ni-PGE sulphide assemblages very similar to the sulphide in the ores at Sudbury.

The Sudbury Structure is generally considered to be the product of a meteorite impact that occurred at 1.85Ga. The Sudbury Structure is defined as consisting of several elements (see also The Geology and Ore Deposits of the Sudbury Structure, OGS Special Volume 1, Eds. E.G. Pye, A.J. Naldrett, and P.E. Giblin, 1984, 604p.):

- 1. Sudbury Basin and all the rocks within it, especially the Sudbury Igneous Complex (SIC), the associated mineralized Sublayer, and the mineralized Footwall Breccias.
- 2. Offset Dykes stemming in a radial fashion and concentrically around the Sudbury Basin. Roughly estimated there is as much sulphide mineralization in the Offset Dykes as in the Sublayer. For example the Frood –Stobie mine (500 Mt orebody) is entirely in the concentric Offset Dyke on the South Range of the Sudbury Basin.
- 3. Shatter cone structures in the basement rocks and in the overlying Huronian Supergroup.
- 4. Sudbury Breccia which occurs peripherally to the Sudbury Basin, and in concentric rings around the Basin. Sudbury Breccia is commonly the host rock to copper-PGE rich deposits peripheral to the Sudbury Basin.

Geology of the Norman-Parkin Twp. area has been described by Meyn (1970) and Muir *et al.* (1980). The PCP area in Norman-Parkin Townships is underlain largely by Proterozoic basic and felsic volcanic rocks. The volcanic rocks are commonly mineralized with Zn-Cu-Pb sulphide assemblages, or with Cu-Au sulphide assemblages.

The PCP area is located within a couple of kilometers from the northeastern edge of the Sudbury Basin and covers the postulated north-northeast extension of the Whistle Offset Dyke stemming from the Sublayer of the Whistle Mine (see Figure 2). The Whistle Offset Dyke trends in the northeasterly direction directly to the PCP area and locally appears to be disturbed by brecciation. The matrix to the breccia consists either of massive sulphide, which are commonly of chalcopyrite-millerite-pyrrhotite-pentlandite assemblages, or of a rock known as Footwall Breccia which is generally associated with the Sublayer environment on the North Range of the Sudbury Basin.

## **Deposit Types**

According to the data presented in this report, three deposit types are recognized in the PCP area, and a fourth variety remains as the exploration target.

- I. Cu-Au deposit associated with volcanic rocks.
- II. Stratabound or VMS Cu-Zn deposit associated with volcanic rocks.
- III. Ni-Cu-Co-PGE mineralization associated with a gabbroic rock or a Footwall Breccia type of rock.
- IV. Whistle Offset Dyke with its sulphide mineralization is the exploration target rock. It is rich in copper and PGE's and carries some nickel and cobalt.

Gold values of up 5g/t have been encountered in one borehole (PC04-10) in association with volcanic rocks in the PCP area. Smaller values of gold measuring in tens to hundreds of ppb's or higher occur in all boreholes from the 2004 drilling program, and point to the possibility of encountering a gold deposit of significant size and grade in the area. Gold is associated with significant values of copper (up to about 0.7% in borehole PC04-9) and small values of zinc (15-30 ppm in the same borehole) which suggests that it is possibly analogous to the keel structure environment in the VMS type of deposit.

The Cu-Zn mineralization associated with volcanic rocks points to a stratabound or a VMS-type of deposit. Anomalous gold is associated with this type of mineralization as well. The gold- copper mineralization is located in the same volcanic rocks as the Cu-Zn type and therefore the two types are genetically closely related.

The Ni-Cu-Co-PGE mineralization is generally associated with mafic-ultramafic rocks. The presence of mineralized gabbroic rocks intersected in the 2004 and 2006 drilling programs, certainly points to that type of association. In logging the core from the 2004 and 2006 drilling projects, however, no definite identification was made whether these gabbroic rocks are related to the Sudbury Offset Dyke type of affiliation or to the Nipissing Diabase magmatic event. This remains to be ascertained.

Identification of the Footwall Breccia in the Whistle Offset target area and the associated highly anomalous PGE's and base metals, however, certainly points to the genetic kinship with Sudbury Structure rocks.

The closest economic base metal-PGE deposit within a few hundred meters of the PCP area is in the Whistle Offset Dyke. Here, the Podolsky orebody has an oblong lens-shaped configuration in longitudinal section measuring about  $250 \times 500$  ft ( $^{\sim}76 \times 152$  m) and is located about 200 m below surface in the Whistle Offset Dyke, below the Whistle Mine (see Figure 9). Its long axis is subvertical, which is commonly the case for most of the deposits in the offset dykes in the Sudbury Structure. Another sulphide deposit (North Zone) in the Whistle Offset Dyke is located further to the northeast from the Podolsky orebody. It is also lensoid in shape in longitudinal section measuring about  $150 \times 300$  ft ( $^{\sim}46 \times 91$  m). It was discovered originally in late 1970's, and it outcrops in low-lying swampy ground.

The model for exploration in the PCP area is therefore an extension of the Whistle Offset Dyke onto the PCP ground, with sulphide deposits either in the near-surface environment or at depth.

#### Mineralization

In the PCP area some of the mineralization is apparently related to the volcanogenic massive sulphide variety, and includes sphalerite, chalcopyrite, pyrite and galena of the VMS type of deposit. No mineralogical work was done to demonstrate whether gold occurs in a native form or is in solid solution in other sulphide minerals. The same can be said about silver.

In the gabbroic rocks the disseminated sulphide mineralization includes pyrrhotite, chalcopyrite and pyrite, and rarely galena veinlets have been noted. To what extent nickel resides in pyrrhotite and pentlandite is not known at this time. No mineralogical work was done to ascertain the mineralogy of gold, palladium, platinum, and silver.

To date, there is insufficient evidence to indicate the length, width, depth and continuity of the mineralized zones on the Post Creek property.

The Podolsky orebody is copper-rich and consists mainly of chalcopyrite, pyrrhotite and pentlandite. Locally millerite is present. Platinum Group Element mineralogy is not known, but elsewhere in the Sudbury orebodies PGE's are present as arsenide, telluride, bismuthinide and other forms (Naldrett, 1984).

## **Exploration**

At this time the North American Nickel Inc. company is in the process of raising funds for exploration in the PCP area but have moved forward with a modest program consisting of shallow-looking geophysical surveys using the beep mat and rock chip sampling. Anomalous electromagnetic and magnetic anomalies were stripped of overburden using a mechanical excavator and where possible representative rock chip samples were collected from mineralization that was exposed. Detailed geological descriptions of new exposures created with the excavator were undertaken prior to sampling. Expenditures on the Post Creek property to date are summarized in Table 10.

Table 10. Detailed summary of exploration expenditures by North American Nickel on the Post Creek property.

	Exploration Expenditures	Date	Description	Source	Amount
1610	Administration Expenses				
	·	04/30/2010	Namex database purchase	Apr-10	12,000.00
		04/30/2010	John Brady	Apr-10	40.00
		05/31/2010	John Brady	May-10	100.00
					12,140.00
4045	Automobile Costs - Fuel, Mileage,				,
1615	Ins	0.4/0.0/0.04.0	Jaka Danda	A = = 40	400.00
		04/30/2010	John Brady Timber Wolf Explorations	Apr-10 EGA10-01-	139.20
		05/18/2010	Inc.	18	36.50
		05/31/2010	John Brady	May-10	242.00
		05/31/2010	Cecil Johnson	28-May-10	960.00
		06/12/2010	Timber Wolf Explorations Inc.	EGA10-06- 12	229.00
		06/30/2010	John Brady	Jun-10	870.00
		06/30/2010	Cecil Johnson	30-Jun-10	1,160.00
			Timber Wolf Explorations	EGA10-06-	
		06/30/2010	Inc.  Mount Morgan Resources	30	199.00
		07/27/2010	Ltd.	0271-522 EGA10-09-	1,995.50
		09/30/2010	Timber Wolf Explorations Inc.	30	203.50
		10/10/2010	Cecil Johnson	Oct 10 10	264.00
		11/25/2010	Timber Wolf Explorations Inc.	EGA10-11- 25	F1 F0
					51.50
		12/01/2010	Cecil Johnson	12/1/2010 Nov Dec	539.00
		12/02/2010	John Brady	2010	708.00
				sub-total	7,597.20
1620	Assay and sampling		Mount Morgan Decourage		
		08/26/2010	Mount Morgan Resources Ltd.	0271-533	1,198.40
		10/26/2010	Mount Morgan Resources Ltd.	0271-553	1,537.00
			Mount Morgan Resources		·
		12/20/2010	Ltd.	0271-574	2,404.00
				sub-total	5,139.40
1630	Field Equipment and Supplies		Timber Wolf Explorations	EGA10-06-	
		06/12/2010	Inc.	12	49.25
		06/30/2010	John Brady	Jun-10	115.42
				sub-total	164.67
1650	Travel & Accommodation				
		07/27/2010	Mount Morgan Resources Ltd.	0271-522	1,819.85
			Mount Morgan Resources		
		12/20/2010	Ltd.	0271-574	1,550.36
				sub-total	3,370.21
1655	Equipment Rental				
		05/31/2010	Cecil Johnson	28-May-10	100.00
		06/30/2010	Cecil Johnson	30-Jun-10	50.00

		00/00/0040	Dat Taylor Oration than Inc.	40000	0.575.00
		06/30/2010	Pat Taylor Contracting Inc.	18082	9,575.00
		07/05/2010	Pat Taylor Contracting Inc.	18096	1,395.00
		11/26/2010	Rintala Construction Ltd.	6386	6,820.00
		12/01/2010	Cecil Johnson	12/1/2010	280.00
		12/02/2010	John Brady	Nov Dec 2010	1,800.00
				sub-total	20,020.00
1670	Geological Consulting				
		04/30/2010	John Brady	Apr-10	1,550.00
		05/18/2010	Timber Wolf Explorations Inc.	EGA10-01- 18	900.00
		05/31/2010	John Brady	May-10	3,700.00
		05/31/2010	Cecil Johnson	28-May-10	8,400.00
		06/12/2010	Timber Wolf Explorations Inc.	EGA10-06- 12	3,177.82
		06/28/2010	Walter V. Peredery	160	10,767.79
		06/30/2010	John Brady	Jun-10	6,350.00
		06/30/2010	Cecil Johnson	30-Jun-10	6,150.00
		06/30/2010	Timber Wolf Explorations Inc.	EGA10-06- 30	3,300.00
			Mount Morgan Resources	0074 504	
		07/01/2010	Ltd. Mount Morgan Resources	0271-534	3,500.00
		07/01/2010	Ltd.	0271-535	3,500.00
		07/31/2010	Mount Morgan Resources Ltd.	0271-536	3,500.00
		08/12/2010	Walter V. Peredery	161	6,000.00
		08/26/2010	Mount Morgan Resources Ltd.	0271-532	2,333.00
		09/30/2010	Mount Morgan Resources Ltd. Timber Wolf Explorations	0271-548 EGA10-09-	3,500.00
		08/31/2010	Inc.	30	2,700.00
		10/04/2010	Walter V. Peredery	162	4,850.00
		10/10/2010	Cecil Johnson	Oct 10 10	1,200.00
		10/10/2010	Philippe Allain	Oct 10 2010	350.00
		10/29/2010	Mount Morgan Resources Ltd.	0271-557	3,500.00
		11/23/2010	Mount Morgan Resources Ltd.	0271-566	2,333.33
		11/25/2010	Timber Wolf Explorations Inc.	EGA10-11- 25	1,500.00
		12/01/2010	Philippe Allain	12/1/2010	1,400.00
		12/01/2010	Cecil Johnson	12/1/2010	4,050.00
		12/02/2010	John Brady	Nov Dec 2010	4,000.00
		12/03/2010	Walter V. Peredery	163	3,714.63
		12/20/2010	Mount Morgan Resources Ltd.	0271-575	3,500.00
		12/20/2010	Wildwood Geological Services	88-84	40.00
		12/28/2010	Thomas Hart	Dec 28 2010	2,500.00
				sub-total	102,266.57

1675	Printing and Shipping				
		06/05/2010	Matrix Geo Technologies Ltd.	5-Jun-10	1,031.08
		06/10/2010	Geotech Ltd.	992411	1,550.00
		12/01/2010	Cecil Johnson	12/1/2010	30.00
				sub-total	2,611.08
					Total: \$153,309.13

## **Detailed Geological Observations**

#### Maki Cu-Zn Occurrence Area

This area (Figure 7) is underlain by felsic volcanic rocks with gossanous zones, granitic rocks, minor basic volcanic rocks and diabasic dykes. The granitic rocks act as a basement rock but are also apparently intrusive into the felsic volcanic rocks as minor lenses up a metre in diameter. The felsic volcanic rocks generally trend in the northwesterly direction, but locally show northeasterly re-orientations. The diabasic dykes trend in a northeasterly direction and apparently follow are restricted to this pattern reflecting tectonic weakness.

The felsic volcanic rocks weather white, but on freshly broken surfaces are commonly light gray to dark gray to black in colour. The rocks are very fine-grained, commonly show fracturing on a centimeter scale, and can be either massive, flow-banded or brecciated. Flow-banding is millimeters to centimeters in thickness, generally has a northwesterly trend and subvertical dips. Millimeter scale felsic vesicles are elongated parallel to the foliation and filled with fine-grained siliceous materials. These structures are visible especially in the weathered surfaces of rocks, but not on the freshly broken rock surfaces. Primary brecciated structures are locally well developed. Fragments measure from millimeters to centimeters in diameter. The matrix is commonly a chloritic material. These are probably flow breccias since some of the fragments have foliations. Judging by the felsic nature of these volcanic rocks, they are interpreted to be rhyolitic in composition. The dark gray nature of these rocks is probably due to the development of secondary chloritic alteration, which makes them appear to be basic, and this is possibly the reason why in the literature some of these rocks are described as silicified basic volcanic rocks. As a general rule the chloritic alteration in rhyolitic volcanic rocks is developed in the area of the keel structures of the fumarolic hydrothermal activity. Hence, the highly chloritized nature of these rhyolitic rocks and the closely associated sulphide mineralization may be indicative of their proximity to the fumarolic hydrothermal activity in the Maki area. Gossanous zones trend in the northwesterly direction. They are from a meter to several meters wide and up to 20 m long. Mineralization varies from massive sulphide lenses to irregular stringers and blotches, to disseminated sulphide. Sulphide minerals include pyrite, sphalerite and chalcopyrite. In massive sulphide lenses pyrrhotite is the main mineral component. In some cases pyrite is the matrix to a breccia. Quartz vein material is associated with the gossanous zones and in some cases form druzy patches. Granitic basement rocks occur about 100 m south of the Maki area. They are pinkish gray in colour, are in part gneissic-looking and typically carry mafic inclusions. Amphibolitic banded volcanic rocks occur just a few meters north of the basement rocks. These mafic volcanic rocks trend in the northwesterly direction and are subvertical in attitude. Granitic rocks in contact with the rhyolitic rocks typically weather rusty-brownish and

carry minor disseminated sulphide. On fresh surface they are dark gray in colour which causes some problems in distinguishing them from the dark gray rhyolitic rocks. The granitic rocks are medium grained, whereas the rhyolitic rocks are very fine-grained. This feature alone serves to distinguish between them. The rusty-brownish granitic rocks are also present in the Whistle Target area.

Diabasic dykes trend northeasterly and apparently cut the felsic volcanic rocks. Some dykes are narrow (2-3 m), but one dyke measures about 10 m in width. They weather dark green and on fresh surface are also dark green. Grain size varies from very fine- to medium-grained, with feldspars strongly altered to a saussuritic epidote-rich material. In one locality the Diabasic dyke is cut by Sudbury Breccia. The Breccia consists of fragments of Diabase dyke in a flow-banded dark green very fine-grained matrix. All ingredients in this Breccia are apparently locally derived. The Sudbury Breccia forms a northerly trending band up to 20 cm wide with minor offshoots of flow-banded Breccia up to a centimeter wide. The fact that the Sudbury Breccia cuts the Diabasic dyke rock suggests that the dyke rock is not related to the Offset Dyke system of the Sudbury event. All Diabasic dykes mapped in the Maki area carry sulphide minerals. Sulphide includes pyrrhotite and chalcopyrite, and form fine-grained disseminations, blebs up to 0.5 cm in diameter, and irregular stringers. The sulphide content varies from about 1% to 10%.

#### Whistle Target Area

Within the Whistle Target area (Figure 7) the rock assemblages include – granitic rocks, gneissic rocks, felsic and mafic volcanic rocks, metasandstone, Diabasic dyke rocks, and Sudbury Breccia. Gneissic rocks are medium grained and contain up to 25% biotite and hornblende. In places they also carry large (up to a cm in diameter) pink euhedral feldspars (5-15%) which are porphyroblastic in character. Such gneissic rocks occur as small lenses, up a few meters in size, in association with granitic rocks. This kind of field relationship indicates that the porphyroblastic gneisses are older than the granites. The granitic rocks are medium grained, pinkish in colour and consist of quartz-feldspar-plagioclase-biotite-muscovite mineral assemblages. The mica content is generally less than 5%. The pink granitic rocks apparently intrude the felsic volcanic rocks, forming lenses up to a few meters in size. Another variety of granitic rock in the Whistle Target area is distinctly different from the pink granitic rock described above. On weathered surface it is either white or grayish-white. Internally, however, it has a typically rusty-brownish weathering but is gray to dark gray in colour on fresh surface. It appears to have a much higher mafic content (10-20%) than the pink granite and is more like the gneissic rock but without pink feldspar porphyroblasts. In this sense it is more like the true basement rock. Its rusty-brownish weathering could be in fact be an indication of the unconformable relationship between the weathered basement and the overlying volcanic-sedimentary Huronian Supergroup assemblage. The contacts between the rusty-brownish granitic rock and the felsic volcanic rocks are subvertical in attitude and have been tectonized to some degree. The rusty-brownish granitic basement rocks commonly have mineralized quartz veins. Quartz veins are up several centimeters wide, occur in subparallel fashion, having northeasterly trends and dipping at about 30° northwest. Sulphide mineralization consists of pyrite and chalcopyrite, forming disseminations, blebs, and even semi-massive sulphide concentrations in the veins. In addition there is another mineral that is associated with the quartz veins. It is metallic gray, non-magnetic, has an internal red reflection, is relatively hard, and is possibly a specular hematite.

The felsic volcanic rocks are very fine-grained and weather typically white. On fresh surface, however, the rocks are commonly in shades of gray, from light gray to dark gray or black. The rock is commonly fractured on a few centimeters scale, and is either massive, or flow-banded, or brecciated. These rocks are very similar to those in the Maki area and can be described as rhyolite. In places the rock is commonly tectonically deformed, having northeasterly orientations and subvertical dips. In places the deformed rocks show well developed left lateral S-shaped drag folds. Minor disseminated sulphide commonly occurs in the felsic volcanic rocks. Sulphide minerals include pyrite and less commonly sphalerite. Metasandstone occurs on the eastern side of the Whistle Target area. They are medium-grained, gray, bedded sequences consisting mainly of quartz and feldspar. Bedding strikes in the northwesterly direction and have subvertical dips. Associated with the metasandstone is fine- to medium-grained amphibolite, in places with fine pyrite seams or disseminations, and locally with minor development of Sudbury Breccia. Pink granitic lenses, less than a meter wide, are associated with the metasandstone. Diabasic dykes occur in association with the metasandstone and felsic volcanic rocks. A variety of Diabasic dyke generally known as "anhedral porphyry" occurs on the east side of the Whistle Target area in association with the metasandstone. The dyke rock is fine-grained, dark green in colour, and contains large plagioclase porphyry crystals about a centimeter in diameter. These plagioclase crystals are highly altered to saussurite and are anhedral in shape due to partial resorption by the magma. Such dykes generally strike in the northwesterly direction on the North Range of the Sudbury Structure. They may be related to the MacKenzie Dyke Swarm covering much of the Canadian Shield. Another variety of Diabase dyke strikes in a northeasterly direction and is associated with the rhyolitic volcanic rocks. These dykes are fine-grained, dark green in colour, and measure up to several meters wide and do not appear to carry any country rock inclusions. However, they commonly carry disseminated sulphide up to 10%. Sulphide minerals include pyrrhotite, chalcopyrite and minor pyrite.

The occurrence of Sudbury Breccia is very well developed on the eastern side of the Whistle Target area. The Sudbury Breccia is irregularly shaped over several meters and is localized on the boundary between granite-gneiss-diabase-metasandstone lithologies. Inclusions of these rocks occur as sub-rounded fragments in a very fine- grained flow-banded mafic dark green matrix. The gneissic rock with porphyroblastic pinkish feldspars occurs as a lens-like body within the pink granitic rock of the area.

### **Geochemistry of Rock Chip Samples**

Tables 11a and b, 12 and 13 summarize the results of multi-element analyses and assays of rock chip samples collected from beneath overburden on the Post Creek property. Maximum values or values that are clearly anomalous are presented in Table 13. High-grade Cu, Au ad Ag are associated with the extension of the Whistle Offset Structure from the Podolsky Cu-Ni-PGM mine onto the Post Creek property (Figure 11). The assays are notable for their low Ni, Pt and Pd contents, a common feature in offset dyke environments in the North Range of the Sudbury Basin.

Table 11a. Summary of multi-element rock chip analyses, Post Creek. UTM coordinates NAD83.

ANALYTE	WtKg	UTM	UTM	Au	Pt	Pd	Ag	As	Be	Cd	Со	Cu	Fe	Мо	Ni
	WGH			FAI31	FAI3	FAI3	ICP40								
METHOD	79	East	North	3	13	13	В	В	В	В	В	В	В	В	В
DETECTI ON	0.001			1	10	1	2	2	0.5	1	1	0.5	0.01	1	1

UNITS	kg			ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	g	5108	51822	ppo	PPS			Pp	pp	Pp	PPIII	pp	,,,	Ppiii	
E5105066	0.502	21	15	103	10	4	<2	164	0.7	<1	36	40.4	>15	<1	9
E5105067	0.66	5110 01	51820 55	12	10	10	<2	8	0.9	<1	46	180	8.14	<1	67
L3103007	0.00	5136	51813	12	10	10	\Z	0	0.9		40	100	0.14		07
E5105080	0.703	23	71	1	<10	3	<2	6	1.3	<1	13	11.5	2.67	1	35
E5405004	4 700	5104	51830	40		40	_	00	0.5		000	055	40.0		4050
E5105081	1.788	94 5103	31 51827	19	10	12	<2	39	<0.5	<1	399	655	10.8	<1	1650
E5105082	0.742	32	19	5	<10	17	<2	3	1.1	<1	24	29.8	11	<1	35
		5105	51825												
E5105083	1.381	38 5108	87	30	10	18	<2	35	<0.5	<1	73	143	12	<1	257
E5105089	1.5	16	51821 57	209	<10	2	<2	230	1	<1	71	62.8	9.88	6	11
		5109	51823		170	_		200				02.0	0.00		
E5105090	2.038	69	98	4	20	11	<2	5	1.1	<1	43	130	5.9	<1	102
E5105091	0.703	5111 00	51823 58	5	<10	2	-2	7	1.5	<1	30	172	5.72	-1	33
E3103091	0.703	5111	51823	3	<10		<2	- /	1.5	<1	30	172	3.72	<1	33
E5105092	1.965	00	58	187	<10	2	2	<3	<0.5	1	40	2010	3.36	2	42
F-10-200	4.670	5111	51823					-	0.0		050	007	0.01		4-
E5105093	1.372	00 5111	58 51823	44	<10	2	<2	3	0.6	<1	253	685	9.21	1	47
E5105094	0.745	00	51623	6	<10	2	<2	4	1.3	<1	45	292	9.2	<1	61
		5111	51823												
E5105095	1.754	00	58	5	<10	3	<2	4	1.1	<1	37	102	8.32	<1	105
E5105096	0.681	5110 27	51820 33	5	20	12	<2	7	0.8	<1	43	144	9.4	4	68
L3103030	0.001	5107	51819	3	20	12	\Z	,	0.0		40	144	3.4	7	00
E5105097	1.309	14	74	52	<10	6	<2	10	0.7	<1	52	793	8.52	2	277
F5405000	4.407	5108	51820		40		0	44	0.5		47	20.0	4.00		00
E5105098	1.137	88 5107	75 51820	2	<10	2	<2	11	2.5	<1	17	39.6	4.99	1	28
E5105099	1.109	95	44	25	<10	2	<2	6	1.5	<1	43	343	12.3	59	94
		5105	51820	>100								>1000			
E5105100	0.807	69	15	00	20	6	>10	212	<0.5	5	95	0	>15	1	166
E5105101	1.116	5105 69	51820 15	1500	<10	3	2	1340	<0.5	1	79	569	13.7	<1	108
20100101	1.113	5103	51819		110		_	1010	40.0		,,,		10.7	,	100
E5105102	0.804	91	84	82	<10	5	<2	45	1.4	<1	45	934	4.53	3	101
E5105103	0.741	5106 21	51820 37	279	<10	3	<2	16	1.1	<1	37	>1000 0	5.98	<1	31
E3103103	0.741	5106	51819	>100	<10	3	<2	10	1.1	<1	31	>1000	5.96	<1	31
E5105110	0.328	31	90	00	10	4	7	126	<0.5	<1	73	0	4.71	2	99
FF465111	0.10	5106	51819	465				000	0.0				0.01	40	40
E5105111	0.48	31 5106	90 51819	403	10	6	<2	232	0.8	<1	57	571	9.81	13	42
E5105112	0.784	31	90	1480	<10	2	<2	89	<0.5	<1	22	1050	3.37	3	22

Table 11b continued. Summary of additional multi-element rock chip analyses with over-range values, Post Creek.

ANALYTE	WtKg	UTM	UTM	Pb	Sb	Zn	Au	Ag	Cu	Fe
METHOD	WGH79	East	North	ICP40B	ICP40B	ICP40B	FAG303	AAS21E	ICP90Q	ICP90Q
DETECTION	0.001			2	5	1	3	0.3	0.01	0.01
UNITS	kg			ppm	ppm	ppm	g/t	g/t	%	%
E5105066	0.502	510821	5182215	5	<5	67				34.3
E5105067	0.66	511001	5182055	8	<5	108				
E5105080	0.703	513623	5181371	4	<5	12				
E5105081	1.788	510494	5183031	17	<5	25				
E5105082	0.742	510332	5182719	10	6	51				
E5105083	1.381	510538	5182587	8	<5	159				
E5105089	1.5	510816	5182157	5	<5	41				
E5105090	2.038	510969	5182398	5	<5	103				
E5105091	0.703	511100	5182358	30	<5	38				
E5105092	1.965	511100	5182358	13	<5	114				
E5105093	1.372	511100	5182358	10	<5	69				

E5105094	0.745	511100	5182358	6	<5	104				
				,						
E5105095	1.754	511100	5182358	6	<5	107				
E5105096	0.681	511027	5182033	12	<5	111				
E5105097	1.309	510714	5181974	7	<5	164				
E5105098	1.137	510888	5182075	18	<5	79				
E5105099	1.109	510795	5182044	6	<5	104				
E5105100	0.807	510569	5182015	41	<5	159	29	18.7	15	19.6
E5105101	1.116	510569	5182015	28	<5	145				
E5105102	0.804	510391	5181984	18	<5	74				
E5105103	0.741	510621	5182037	9	<5	27			1.93	
E5105110	0.328	510631	5181990	47	<5	17	17		1.08	
E5105111	0.48	510631	5181990	41	<5	28				
E5105112	0.784	510631	5181990	73	<5	9				

Table 12. Additional multi-element rock chip analyses, Post Creek.

ANALYTE	WtKg	UTM	UTM	Au	Pt	Pd	Cu	Fe	Zn	Ag	As	Мо	Pb	Sb	Se
METHOD	WGH79	East	North	FAI	FAI	FAI	ICM	ICM	ICM	ICM	ICM	ICM	ICM	ICM	ICM
				515	515	515	40B	40B	40B	40B	40B	40B	40B	40B	40B
DETECTION	0.001			1	10	1	0.5	0.01	1	0.02	1	0.05	0.5	0.05	2
UNITS	kg			ppb	ppb	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
5105074	1.379	510692	5181858	37	<10	1	1000	8.93	306	0.63	5	0.71	3	0.84	<2
5105075	1.163	510680	5181909	44	<10	3	904	9.27	247	0.23	4	0.92	2.9	0.38	<2
5105076	2.777	510680	5181907	8	<10	1	145	11	503	0.18	6	0.92	3.4	0.59	<2
5105077	2.178	510087	5181907	6	<10	5	50.2	6.91	127	0.13	4	1.18	2.3	0.15	<2
5105078	0.369	510812	5182009	72	<10	10	208	13.6	129	0.22	66	0.76	6.6	0.36	7

ANALYTE	WtKg	UTM	UTM	Sn	Та	TI	W	Zn
METHOD	WGH79	East	North	ICM40B	ICM40B	ICM40B	ICM40B	ICP90Q
DETECTION	0.001			0.3	0.05	0.02	0.1	0.01
UNITS	kg			ppm	ppm	ppm	ppm	%
5105074	1.379	510692	5181858	2.5	0.96	0.34	1.1	N.A.
5105075	1.163	510680	5181909	2.5	0.91	0.75	0.7	N.A.
5105076	2.777	510680	5181907	2.2	0.88	0.52	0.8	N.A.
5105077	2.178	510087	5181907	0.8	0.39	0.12	1	N.A.
5105078	0.369	510812	5182009	2.4	0.71	0.16	2.4	N.A.

Table 13. Summary of strongly elevated Cu, Au, Ag responses accompanied by low Pt and Pd, Post Creek, Whistle Offset Structure.

ANALYTE	WtKg	Au	Au	Pt	Pd	Ag	Ag	Cu	Cu
METHOD	WGH79	FAI313	FAG303	FAI313	FAI313	ICP40B	AAS21E	ICP40B	ICP90Q
DETECTION	0.001	1		10	1	2		0.5	0.01
UNITS	kg	ppb		ppb	ppb	ppm		ppm	%
E5105100	0.807	>10000	29 g/t	20	6	>10	18.7 g/t	>10000	15
E5105101	1.116	1500		<10	3	2		569	
E5105102	0.804	82		<10	5	<2		934	
E5105103	0.741	279		<10	3	<2		>10000	1.93
E5105110	0.328	>10000	17 g/t	10	4	7		>10000	1.08
E5105111	0.48	403		10	6	<2		571	
E5105112	0.784	1480		<10	2	<2		1050	

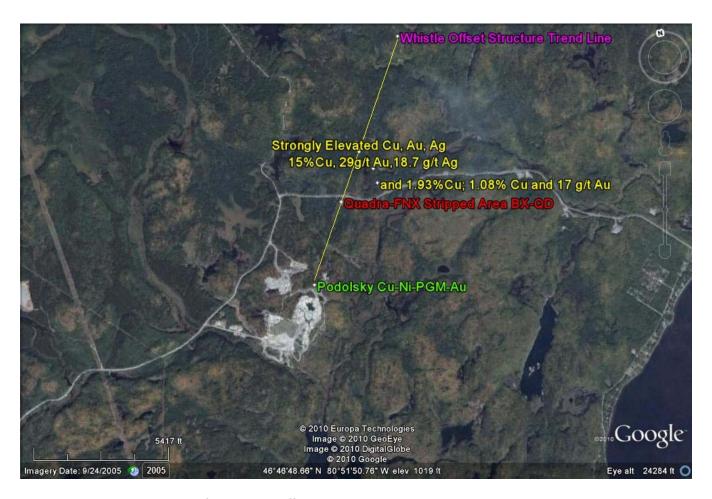


Figure 11. Google Earth image of the Whistle Offset trend line, Podolsky Cu-Au-Ni-PGM mine and strongly elevated Cu, Au and Ag assays, Post Creek property. Note: BX-QD refers to Sudbury breccias and volumetrically minor quartz diorite.

## **Drilling**

Not applicable. Previous exploration drilling has been described under Exploration History section.

# **Sampling Method and Approach**

In the past years, exploration work was carried out either by prospectors, or lately by professional geologists. The professional geologists (for names see the list of references at the end of this report) were all qualified people, with good reputations, extensive exploration experience, and were members of the Association of Professional Geoscientists of Ontario, or Manitoba or British Columbia. Sampling of the diamond drill core generally was in intervals of one meter or about half a meter. All visible mineralization was sampled.

Sampling of the soils for MMI surveys were carried by Dr. Mark Fedikow, who took great care to sample the proper depth, and used a plastic utensil for the final sampling of soils to eliminate possible contamination factors. The sampling procedure included digging a shallow hole in the soil with a small spade free of paint or

rust. Soil sample collection was generally taken at depths of 10-20 cm from surface. The collected sample, weighing up to 400 grams, was then sieved in a vinyl colander to remove pebbles and particles larger than 2 mms. The sample was then put into a zip-lock plastic bag and subsequently sent in batches to the laboratory for analyses.

Sampling stations were about 25 m apart. Each station had assigned UTM coordinates using NAD 83 datum. Each sample site was flagged by a metal tag bearing the same number as the sample itself. The metal tags were attached to the nearest tree and flagged by a colored tape.

Soil sampling was carried out along transects across known structures or mineralized zones. In the case of the Whistle Offset Dyke target in the PCP area, the transect of soil sampling was carried out in an east-west direction, or perpendicular to the Whistle Offset Dyke trend located a few hundred meters south of the PCP area.

Outcrop rock chip samples were collected with a prospectors pick aided by a chisel. These samples were exposed beneath overburden that had been cleared using a mechanical excavator. Chip samples are composite chips taken over a specified area of an outcrop, such as 1 meter by 1 meter with the chips being representative of the area sampled. The samples are taken with a rock hammer or heavier sledge hammer. The area sampled and sample numbers are clearly labeled with tags. The areas sampled are often specific to veins, mineralized zones and host rocks to the mineralization. Sample locations are documented with a hand-held GPS unit and recorded separately in a note book along with sample weight. These written data are entered into a digital database in the evening.

## Sample Preparation, Analyses and Security

Sample preparation was carried out using standard procedures of crushing and milling practiced in the laboratories of Ontario over the last ten years or so. For example SGS Laboratories, 185 Concession St, Lakefield, Ontario, KOL 2HO, used the following procedures in processing the borehole samples from the PCP area:

- Code 21 Crushing the entire rock sample,
- Code PPO2 Milling 200g of crushed rock in a CHROMIUM STEEL vessel,
- Code ICP12B/ICM-40B ICP Aqua-Regia dissolution of the sample, for base metal assaying
- Code FA1303/515 Fire assaying for Au and PGE's, by inductively coupled plasma-mass spectrometry (ICP-MS).

A pulverized sample of about 30 g was used for each analysis.

Analyses from the recent program undertaken by North American Nickel used a similar approach. Rock and soil analyses were undertaken by SGS Mineral Services (1885 Leslie St., Toronto, Ontario, M3B 2M3) an ISO 2005 certified company.

There is no sample preparation necessary for the determination of metal contents in soil samples that are analyzed by the Mobile Metal Ions Technology. Metal contents in soils analyzed by Mobile Metal Ions

Technology are determined by weighing 50 g of sample into 50 ml of extractant. Subsequent to agitation and a 24 hour settling time the extraction is centrifuged and the supernatant is aspirated into an ICP-MS unit. Analyses at parts per billion and sub-parts per billion are recorded.

For security reasons collection of sampling was carried out under a strict supervision of the professional geologists who were in charge of the project at any particular time period. Transportation of the samples to Laboratories was by Greyhound Bus system. After delivery to the Laboratory, it became the responsibility of that Laboratory to keep the samples in a secure place.

#### **Data Verification**

As a general rule, barren and repeat samples were submitted periodically with various batches of samples as a check on the laboratory procedural techniques and precision of the techniques.

Various, well analyzed standards were employed as a check on the accuracy of the methods used in the analyses. Standards used include: UMT-1, WMG-1, ANG, SDC-1, DNC-1, SCD-1, and GXR-1, 2, 4 and 6. Barren and repeat samples were submitted for analyses on a periodic basis.

Most of these double checking techniques produced acceptable results, which were within the error of the analytical method used for any given metal.

In the soil sampling a similar verification technique was systematically used especially for samples with previously analyzed anomalies in various metals.

Repeat analyses produced data which were within the acceptable variation for the analytical method used.

The author of this report did not verify the rock and soil geochemical data described from the exploration program. The quality assurance and quality control protocols implemented by ISO accredited laboratories and by the previous operators on the ground were deemed to be satisfactory.

## **Adjacent Properties**

In the vicinity of the PCP there are several active exploration companies.

Vale still has some property near the closed Whistle Mine that produced about 6.68Mt of 0.75% Ni, 0.21% Cu and very minor PGE's. At this time Vale is not carrying out any extensive exploration programs in the area.

Quadra FNX Mining (formerly FNX Mining) acquired the Whistle Offset Dyke north of the Whistle Mine from Vale Inco, and is actively mining Cu-PGE-rich mineralization at the Podolsky Mine in the Whistle Offset Dyke. North American Nickel is active in exploring the environment especially in close vicinity to the Podolsky Mine.

Wallbridge Mining has been actively exploring the Parkin Offset Dyke for several years, under an option agreement with Falconbridge/XStrata Mining. Recently Wallbridge Mining has entered into an option agreement with Champion Bear Resource Ltd. to explore the northern part of the Parkin Offset Dyke.

Just to the north of the PCP there is the Halcyon property located on the south side of Parkin Twp. This property has been optioned from J. Brady by North American Nickel. Prospecting of this property led to the discovery of gold (up to 0.27 oz/t in ~1930) in volcanic rocks, and up to 0.056 g/t in the associated graphitic rock in 1992 (personal communication from J. Brady). In 1953, New Alger Mines drilled 4 DDH's and reported the presence of minor pyrrhotite, chalcopyrite and arsenopyrite (Zurowski, 1953). During 1987-1988 Imperial Metals Corporation carried out an airborne geophysical EM and magnetic surveys identifying a number of targets (Barrie, 1987) which were followed by soil geochemical field work (Gorc, 1989). These exploration efforts identified both volcanogenic Cu-Zn anomalies and base-metal-PGE anomalies associated with gabbroic rocks. In late 1996, J. Brady (personal communication) followed up on the Imperial Metals exploration work from 1987-1988, and obtained significant gold results (up to 5 g/t Au) in the area of a volcanic-sedimentary contact and adjacent to a long sinuous and brecciated iron formation. Brady also reported gold values up to 16 g/t from trenching along a diabase contact located close to the Parkin/Aylmer Townships.

In 2004 (Dyer *et al.*), a Lake/Pond sediment geochemical survey was carried out by the OGS (File 6126). This study showed a number of sites with highly anomalous Ag-Au-Cu-Pt-Pd metals, particularly "Anomalous Area 6" on the Halcyon property.

The Marble Mountain property held by J. Brady, (personal communication), is located west-northwest of Halcyon property, just west of the Parkin Offset Dyke. The Marble Mountain property has an unusual breccia zone in a calcareous rock exposed by stripping and washing by J. Brady. The breccia zone consists of angular blocks and smaller fragments of Huronian Proterozoic conglomerate, diabase, and quarztite in a calcareous matrix composed of calcite and some dolomitic materials. In the SW end of the calcareous breccia, Wallbridge Mining discovered in 2003, fragments of the Parkin Offset Dyke rock in the vicinity of the Parkin Offset Dyke where the Dyke has a northwest-trending kink. It is this site where the Milnet Cu-Ni-PGE deposit is located (personal communication from Wallbridge Mining and J. Brady, see Figure 3). This kind of relationship is analogous to the brecciated Whistle Offset Dyke and the Offset Dyke fragments found in Sudbury Breccia north of the Podolsky Mine, described in this report. Brady estimated the calcareous breccia zone is up to 900 m wide and 6-10 km long, trending in NORTHWEST direction.

In 1986 Erana Mines drilled (8 DDH's, 1458 ft) on a surface exposure of crystalline calcite along the south side of the breccia zone referred to in the above paragraph, about 200m from the northwest corner of McFie Lake. This program outlined a resource of ~150,000 tons of calcite, (99% purity, and 94% brightness), and associated disseminated and massive sulphide (pyrite) in cherty bands up to 14 ft wide. Assays gave 0.017-0.045 oz/t Au over several feet of mineralized core. J. Brady re-sampled some of the intersected sulphide (personal communication). New assay results yielded up to 0.6 oz/t Au, 0.85% Cu, 0.66% Ni, 0.07% Co, and about 3% Zn. Country rocks peripheral to the calcite deposit are intensely carbonatized and albitized forming alteration zones or haloes up to 400m wide.

Galena mineralization in the Mountain Lake property is located near the southwest corner of claim 1211011 (see Figure 3) and has been described by W. Corking (1947) for Jonsmith Mines. Channel sampling yielded highly anomalous gold values (described as up to \$9.80 in value, for the 1947 year). Drilling in that area reportedly intersected a segment of the Offset Dyke rock. In 1972 Decade Exploration did some stripping and sampling over the same exposure, yielding up to 0.24oz/t Au, 0.23% Cu, and 1.45% Pb over a 7 ft section. In 1982 Jarvis

Resources (D. Constable 1982) carried out stripping and additional drilling over the Marble Zone. Drill logs from this project reported "silicified breccia, pyritic breccia, mineralized zones of pyrite-chalcopyrite-galena-chlorite-biotite, and visible gold" (Assessment Files on Parkin Twp.). J. Brady followed up by limited surface stripping and trenching over some of these borehole locations (personal communication). Assay data on mineralized samples yielded up to 23.18 g/t Au, 127.2 g/t Ag, and 0.58% Cu. A new 7m wide zone of pyritic mineralization, about 100m south of this old work, area gave about 7 g/t Au.

There are a number of significant geological discoveries, therefore, in association with the Parkin Offset Dyke:

- 1. the northwest kink of the Parkin Offset Dyke is on strike with the calcareous breccia zone,
- 2. a new dyke of Offset type is present in the calcareous breccia zone, and
- 3. fragments of the Offset Dyke occur also at the northwest segment of the Parkin Offset kink, in calcareous breccia.

There has been very little exploration follow-up on these new discoveries in recent years.

The author of this technical report has been unable to verify the information and that the information is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

## **Mineral Processing and Metallurgical Testing**

Not applicable.

### **Mineral Resources and Mineral Reserve Estimates**

Not applicable.

#### Other Relevant Data and Information.

Not applicable.

## **Interpretation and Conclusions**

The presence of two Offset Dykes in close proximity to each other is a very unusual geological feature in the Sudbury Structure. The Parkin Offset dyke is very peculiar in that it does not seem to have a connection to the main mass of the Sudbury Igneous Complex (SIC), and particularly with the Sublayer forming depressions in the footwall environment. However, when looking at the Parkin Offset Dyke, its trend coincides, or is on strike with the Sublayer type mineralization at depth in Norman Twp. recently discovered by Falconbridge/XStrata. Such discontinuities do occur in Offset Dykes elsewhere in the Sudbury area, such as in the Copper Cliff Offset Dyke

for example (see The Geology and Ore Deposits of the Sudbury Structure, OGS Special Volume 1, Ore deposits of the Copper Cliff Offset, p.347-360, L.B. Cochrane, 1984).

The northwest kink in the Parkin Offset Dyke in Parkin Twp. is also an unusual feature, and is obviously a structural trap that hosts the Milnet sulphide deposit. The other sulphide deposits in the Parkin Offset Dyke found further SW along the Dyke, vary from massive sulphide with a low tenor of nickel and copper (Ni/Cu of about 5/1), to more normal disseminated to net-textured sulphide with a ratio of Ni/Cu close to 1.

Another unusual feature of the Parkin Offset Dyke is that it has been in part brecciated in the vicinity of the northwest trending kink structure, and an inferred apophysis of the Parkin Offset Dyke is apparently associated with the large calcareous breccia located just northwest from the kink structure. Both the kink structure and the apophysis are apparently on strike with each other.

The Whistle Mine located in the Sublayer in Norman Twp. is also rather unusual. The massive sulphide mineralization is rich in pyrrhotite and poor in copper, with a Ni/Cu ratio of about 4/1. This type of ore is analogous to the pyrrhotite mineralization found in the southwesterly part of the Parkin Offset Dyke mentioned above.

At depth at the Whistle Mine, there is an Offset Dyke that stems from the Sublayer and trends in the northeasterly direction (at surface the Offset Dyke is either weakly developed or is apparently absent). Where this Whistle Offset Dyke outcrops, the Dyke shows brecciation with chalcopyrite/millerite-rich mineralization forming the matrix of the breccia, but in addition there is a variety of the so-called Footwall Breccia also in the matrix. In the North Range such Footwall Breccias usually occur at the base of the Sublayer, but in this case the Footwall Breccia was apparently injected into the Dyke, more or less simultaneously with the Dyke. Minor but distinct Footwall Breccia phases are present in the granitic gneisses on the gravel road to the Indian Reserve #11 at Wanapitei Lake.

Thus the copper-rich mineralization seen on surface at the Whistle Offset Dyke is also present at depth (Podolsky Mine).

After the Whistle Offset Dyke was discovered, it was difficult to trace it further northeast due to a lack of good outcrop exposure. On earlier geological maps it was shown, however, extending up to the so-called Post Creek fault shown trending in a northwesterly direction. This fault is shown located on the south side of the PCP property. This was done with the intent of connecting the Whistle Offset Dyke to the Parkin Offset Dyke which apparently lacks the connection to the SIC. This was a geological inference, since the Parkin Offset Dyke south of the postulated Post Creek fault, continues further SW past the postulated fault.

That the Whistle Offset Dyke is structurally disturbed was also demonstrated by the FNX Mining stripping and washing of a large area N-NE of the Offset Dyke. Here fragments of an Offset Dyke type of rock occur in the Sudbury Breccia.

In a later compilation map of the Sudbury geology (Map 2491) this Post Creek fault was removed (OGS 1984).

Thus there is some evidence that the Whistle Offset Dyke extends further N-NE from the known outcropping occurrences of the Dyke. There is also the evidence of the presence of a boulder of the Offset Dyke rock found

by Oliver Maki on the south border of Claim 864656 about 200 m northeasterly from the northeastern end of the Post Creek Lake. The boulder carries inclusions of granitic rock and is sparsely mineralized. The southwesterly trend of glacial striations in the Sudbury area do not eliminate the possibility that the Offset Dyke boulder could be from the northern part of the Parkin Offset Dyke, but it could just as easily be derived from the north-northeast- trending Whistle Dyke in the PCP area or even farther northeast.

Thus by eliminating the possibility of a faulted connection between the Parkin and Whistle Offset dykes, it becomes clear that the Whistle Offset Dyke could extend further NE than is shown on any published geological maps. The very long north-northeasterly extension of the Parkin Offset Dyke to the northeastern side of Parkin Twp. gives reasons to think that the Whistle Offset Dyke may be utilizing/occupying the northeasterly trending structures very much evident from the geophysical surveys of the PCP area.

The presence of the Footwall Breccia in the PCP area has been recorded in a number of places forming the northeasterly trend. This trend is more or less on strike with the Whistle Offset Dyke located further south. Highly anomalous base metal and PGE mineralization recorded in one of the Footwall Breccia occurrences certainly points towards its kinship with the Sudbury type of mineralization. This could be taken as evidence of the continuation of the Whistle Offset Dyke into the PCP area.

#### Recommendations

Numerous recommendations have been made by a number of investigators carrying out exploration in the Post Creek Property area. These recommendations were based on prospecting, magnetic, electromagnetic (EM), and induced potential (IP) geophysical surveys, soil sampling using the MMI technique, and geology. As a result of these exploration efforts several different mineral targets were recognized-

- I. Au-Cu targets in volcanic rocks
- II. Cu-Zn targets in volcanic rocks
- III. Cu-Ni-Co-PGE targets associated with gabbroic rocks

Although much of the emphasis in the past as placed on finding the Cu-Ni-Co-PGE target, related to the Whistle Offset Dyke type to be specific, so far it is not evident that such a target has been actually found. In all cases where some Cu-Ni-Co-PGE mineralization has been encountered in the drill core it is always described as associated with a "gabbroic rock". Whether this gabbroic rock is part of the Whistle Offset Dyke or a Nipissing Diabase is not clear at this time. Hence the first and most important recommendation is to re-examine these gabbroic rocks more closely and make a distinction whether they belong to the Nippissing Magmatic Event or to the Sudbury Event such as the Whistle Offset Dyke. This can be easily done by using some knowledgeable geologist familiar with the Offset Dykes as they occur in the field, and supported or substantiated with petrographic studies.

There has been considerable geophysical/geochemical work done so far on some of the anomalies in the PCP area. Hence, stripping and power washing of these anomalies is the next recommended approach. This could be done in conjunction with beep-mat surveys and field mapping.

Thus several approaches are recommended at this stage in focusing on the Whistle Offset Dyke type of target. Each of these approaches could be undertaken by a crew of two:

- Re-examine previous boreholes and redefine the nature of "gabbroic" rocks recorded in the logs, whether they are affiliated with the Nipissing type of magmatic rocks, or the Sudbury Event type of rock, such as the Whistle Offset Dyke type of rock
- Use beep-mat surveys in conjunction with field mapping, with special emphasis on proper identification of either barren or mineralized Offset Dyke type of rocks.
- Use stripping of overburden and power washing in geophysically anomalous areas to gain a better understanding of the geological environment of the PCP area.
- Use stripping and power washing in geochemically anomalous areas to see how this approach compares to the geophysical approach.
- Use stripping and power washing of outcropping of the mineralized Footwall Breccia reported by Namex Explorations Inc.
- Use stripping and power washing over known borehole locations with highly anomalous Ni-Cu-PGE's such as PC04-5, -6, -8, -10
- Once the Whistle Offset target has been identified, the geophysical or geochemical approach becomes very effective in following up the target structure and exploring further.

Specific targets for stripping of overburden and power washing include:

- 1. Maki VMS-type of sulphide mineralization
- 2. East Zone of the northeast-trending geophysical anomaly
- 3. Middle or Central Zone of the northeast-trending geophysical anomaly
- 4. West Zone of the northeast-trending geophysical anomaly
- 5. Best MMI anomaly in the E-W transect
- 6. Borehole locations PC04-5, -06, -08, -10

Locating the Whistle Offset Dyke target in the PCP area is the most important part of the exploration program at this time. The Offset Dyke can be mineralized or barren. Mineralization can be in the near-surface environment, or it can be at depth. Such mineralization can de detectable using a variety of geophysical or geochemical techniques, but once that mineralization has been found we come back to the basic question of identifying properly the host rock. But if the host rock happens to be barren of sulphide, geophysical approach becomes limited. Hence two simple approaches can be used to solve this dilemma. Field mapping of the area should be carried out with special emphasis on identifying the host rock that carries sulphide mineralization. Field mapping, of rocks that are barren but are of the Offset Dyke type, is equally important. Field mapping in conjunction with a simple beep-mat could be an inexpensive but an effective combination.

Once the location of the Offset Dyke in the PCP is affirmed then all geophysical/ geochemical techniques become very effective and productive.

A summary of all pertinent data related to the exploration of the PCP area are given below:

- 1. The Post Creek fault separating the Whistle and Parkin Offset Dykes is provisory in character, and is not a regional structure.
- 2. Both Dykes have outcrops of the Dyke rock on the other side of the fault, showing no obvious displacements.
- 3. Both Dykes have evidence of considerable tectonic disturbances.
- 4. Radial Offset Dykes in the Sudbury Structure generally extend for many kilometers away from the Sublayer environment into the footwall rocks.
- 5. Elimination of the Post Creek fault as an artifact of interpretation therefore leads to the concept that the Whistle Offset Dyke extends further northeast into the PCP area.
- 6. Radial Offset Dykes are commonly mineralized and carry discrete vertically oriented oblong massive sulphide orebodies, from a few million tons to tens of millions of tons.
- 7. On the PCP ground the Whistle Offset Dyke is the exploration target.
- 8. PCP area has many sulphide showings of the VMS type (Cu-Zn-Pb-Au). These are of secondary interest in exploring the area.
- 9. Geophysical surveys have indicated that the regional volcanic rocks trend in the NORTHWEST-SE direction, whereas distinct northeasterly trends are later and are on strike with the Whistle Offset Dyke which is located just a few hundred meters south.
- 10. MMI-type of geochemical soil surveys in the PCP area indicates the presence of VMS environments and base metal-PGE anomalies (Cu-Ni-Co-PGE's) which could be related either to the Nipissing magmatic event or the Offset Dykes.
- 11. Drilling results show both VMS-type and Cu-Ni-Co-PGE's mineralization associated with gabbroic rocks.
- 12. The genetic affiliation of such Cu-Ni-Co-PGE's mineralization remains to be ascertained and requires further studies.
- 13. The presence of Footwall Breccia-type of rock identified in the PCP area, points to its genetic relationship with Whistle Offset Dyke, where similar rocks have been identified
- 14. One sample of Footwall Breccia with sulphide mineralization from the PCP area carries about 1.5% Ni+Cu and 3.4 g/t of Au+Pt+Pd.
- 15. One weakly mineralized boulder of Offset-type rock has been found in the PCP area, just east of the Post Creek Lake.
- 16. Three zones of northeasterly trending IP anomalies are recognized in the PCP area.
- 17. These three zones measure about 2 km in total length.
- 18. Only about 1 km of the Central IP anomaly has been explored by drilling.
- 19. Drilling intersected mineralized volcanic and gabbroic rocks. Petrographic work on the gabbroic rocks is recommended for a positive identification of Whistle Offset Dyke rock.
- 20. Stripping of overburden and power washing is recommended on a number of exploration targets.
- 21. A drilling program is also recommended.

A two-phase exploration program should be considered as follows:

### Phase 1: Exploration Program - Post Creek Property

Based upon recommendations a Phase 1 exploration program is proposed. The specifics of the program and the associated costs are summarized in the suggested progression below:

Action Item	Cost
Re-log and sample historic Namex Exploration drill holes to re-define the nature and character of the gabbroic rocks intersected in previous drilling; petrography and geochemistry/assays.	\$35,000.00
Beep mat shallow electromagnetic surveys to cover the entire property to assess for near-surface mineralization.	\$10,000.00
Overburden stripping (excavator) and outcrop exposure washing (WAJAX pump) in all geophysically, geochemically and geologically significant areas.	\$30,000.00
Geological mapping of the property with particular attention to structural elements and potential Offset Dyke environments.	\$50,000.00
Deep-looking ground geophysical surveys (EM/Magnetics) in areas of suspected or demonstrated geophysical/geochemical/geological anomalies.	\$100,000.00
TOTAL COST	\$225,000.00

### Phase 2: Exploration Program – Post Creek Property

Proposed general plan for drilling targets in the PCP area subsequent to successful completion of Phase 1 exploration program include the following targets:

1. Undercut boreholes PC04-5, -06, -08, -10 to a depth of about 400m.

Total cost: 3000m @ ~\$100/m = \$300,000

2. A fence of shallow boreholes designed to intersect East, Central and West Zones of the NE-trending geophysical IP anomalies: 7 boreholes at -45° to a depth of about 200m.

Total cost: 2500m @ ~100/m = \$250,000

3. Two shallow boreholes into the northern extensions of the NE-trending geophysical anomalies which have not been drilled in previous years. These include areas in claims 864655, 1094826, 1198500, 1094824: 8 boreholes to a depth of about 250m.

Total cost: 2000m @ ~100/m = \$150,000

Depending on the new drilling results, boreholes could be geophysically surveyed to detect massive or disseminated sulphide in proximity to the boreholes. Two techniques are commercially available – down the borehole UTEM, and Radio-Imaging (RIM) techniques. The UTEM technique is used to detect massive sulphide in close proximity (within 50m) to the borehole surveyed. The RIM technique requires a pair of boreholes per survey and detects both disseminated and massive sulphide giving a configuration of their shapes, and their position between the boreholes surveyed. Whereas the UTEM data take up to two weeks for an interpretation, the RIM data interpretation is generally available within 24 hours after the survey. In both cases the total cost per survey is about \$10,000 to \$15,000 per borehole (UTM) or per pair of boreholes (RIM).

Therefore, the total cost for Phase 2 can be summarized below:

Action Item	Cost
Petrographic work on gabbroic rocks in boreholes	\$5,000
Proposed drilling plan	\$700,000
Geophysical surveys on boreholes (contingency) TOTAL COST	\$50,000 <b>\$755,000</b>

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## Date and Signature of the Author

I, Walter V. Peredery of the City of Sudbury, Ontario, do hereby certify that as the author of this Technical Report entitled "Report on Post Creek Property in Norman and Parkin Townships, Sudbury Mining District, Ontario" dated January 10, 2011, I hereby attest to the following statements:

- I have visited the Post Creek Property intermittently between June and October of 2010, with my most recent visit in October 19, 2010. Previously I examined the geology and mineral potential of the property as a consulting geologist to Namex Explorations Inc.
- I am a graduate of McGill University in Geology, B.Sc. (1964), M.Sc. (1965), and a post-graduate of the University of Toronto in Geology. PhD (1972).
- I am an independent consulting geologist residing at 1974 Armstrong St., Sudbury, Ontario, P3E 4W1.
- I am a member in good standing of the Association of Professional Geoscientists of Ontario, membership #1051.
- I have practiced my profession continuously since graduation.
- I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purpose of NI 43-101.
- My relevant experience includes 32 years with the International Nickel Company of Canada (Vale Inco) in several different capacities including as an exploration geologist, mine geologist, research geologist, supervising geologist, and staff geologist, and also 12 years as an independent consulting geologist.
- I am responsible for the preparation of all portions of this Technical Report titled "Report on Post Creek Property in Norman and Parkin Townships, Sudbury Mining District, Ontario, dated January 10, 2011.
- As of the date of this Certificate, to my knowledge, information and understanding, this Technical Report contains all pertinent scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- I am independent of the issuer as defined by Section 1.4 of NI 43-101.
- I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

Signed and dated this 10th day of January 2011, at Sudbury, Ontario.

Original Document signed by Walter V. Peredery, PhD, PGeo.