

**TRENCHING-STRIPPING AND MAPPING REPORT**

**NORTH ROCK PROPERTY**

**2006**

Watten and Halkirk Townships  
Kenora Mines & Minerals Division  
Ontario

NTS 52C/11NE

for

MetalCorp Ltd.  
309 South Court Street  
Thunder bay, Ontario. P7B 2Y1

VOLUME I

by

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December 20, 2006  
Thunder Bay, Ontario



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## **Summary**

The North Rock Property of MetalCorp Ltd. (MTC) includes 2 blocks of claims called North Rock and Cousineau, and consists of 55 claims totalling 331 units of which 6 optioned from James E. Bond II, of Moorefield, West Virginia, U.S.A., and Aubrey Eveleigh, of Thunder Bay, Ontario. The property is located within the central portion of the Fort Frances-Mine Centre Greenstone Belt, of the Wabigoon Subprovince, Northern Ontario, 283 km west of the city of Thunder Bay, and 25 km east-northeast of the town of Fort Frances. Primary access for the eastern portion of the property is via several logging roads and trails from Highway 11. The Trans-Canada Highway 11, the southern trace of the Canadian National Railway (CNR), and a powerline pass through the eastern portion of the property. Access to the northern and southern portions of the property can be achieved by boat on Grassy Portage Bay and Seine Bay of Rainy Lake, respectively.

Between early May and late September 2006, MTC completed 15 strips of trenching work in 4 strategic areas known as Beaver Pond, Main South Zone, East Zone and Bjorkman (see figure 4). Pressure washing of the trenches was conducted in the same time as of the stripping to clean and get as much rock exposure as possible in that area, each trench being excavated some 10 meters wide by 60 to 80 meters long on average along an azimuth of 330 degrees to perpendicularly cross the mineralized zones. Pressure water equipment such as fire hoses and wajax pumps were utilised to perform this work. Following this, a detailed geological mapping was carried out for better understanding of the structural controls related to the mineralization. Several lines were then painted on the rock to conduct a systematic channel sampling program over each trench to track the mineralized horizons related to every rock unit in the vicinity of the main mineralized structure, the Gabbro Contact. Over the 15 trenches, a total of 1868 channel samples were taken and submitted to ALS Chemex, in Thunder Bay, Ontario, for analyses.

Prior to the work by MetalCORP, the property was known to host at least 7 base metal occurrences, 2 Cu mineralized zones, and one Cu deposit with historically outlined tonnage and grades. Mapping the trenches over the main occurrences offer an outstanding view of the geology in those areas, as well as a field of discussion and argumentation on the settings and the genesis of the mineralization to be used as a tool for further exploration.

## **Recommendations**

The actual conclusions in relation with the trenching program remind us how complex is the nature of this type of deposit associated with the Grassy Portage Intrusion and its layered gabbro. This is a magmatic type of deposit with dominant copper and some un-determined precious metals such as gold but mainly PGE's. Mapping the zones made it clear that we deal with a strong remobilization factor on both sides of the gabbro contact and that if we find some obvious disseminated mineralization in the gabbro, two sets of fracturation also dominate this area along the contact and seem to be amongst the main traps with the contact for this mineralization.

It is then recommended to define more closely these zones by diamond drilling in accordance with these facts, and elaborate a strategy to cut the mineralization with an appropriate azimuth. It is also recommended to verify new extensions of these zones more broadly over the property, such as the west extension of Beaver Pond with kilometric steps, test the gabbro contact east of the highway and finally the immediate west extension of the Mironski Zone on the south rim of the layered intrusion, and see if similar mineralization exist at that location. Some 3,000 to 4,000 meters of drilling should be planned to complete these tasks with a budget of approximately \$1M.

## 1.0 Introduction

MetalCorp Ltd. (MTC) initiated a trenching-stripping program at the beginning of May 2006 as an approach to a better understanding of the geology and structural controls of the mineralization over the four main known zones of the property such as Beaver Pond, Main South Zone, East Zone and Bjorkman (see figure 4). The property is located within the central portion of the Fort Frances-Mine Centre Greenstone Belt, of the Wabigoon Subprovince, northern Ontario.

Planning of the program as well as arrangements with the field personnel and contractors began on May the third, followed by the start of field work by May the 15<sup>th</sup>. An excavator, usually called backhoe, was brought on site to start digging at the Beaver Pond Area. Rotating crews followed behind with pressure water equipment consisting of fire hoses connected to diverse pumps for washing and cleaning the exposed rock. Several field technicians were sharing this particular work with another parallel line cutting program on the property, and their time is detailed in Appendix III: Costs of Trenching Program. Once the trench was exposed and cleaned, the geologist went over it to take all measurements in relation with the location of the trench and painting of the channel lines to be sampled by the technicians with gas powered rock saw. An averaged samples was about one meter long by 2-3 cm wide and 5cm deep, then bagged and sent to ALS Chemex of Thunder Bay for analyses.

MTC contracted Eveleigh Geological Consulting (EGC) of Thunder Bay, Ontario, to perform the Trenching and Mapping Program. North Rock Property has excellent potential to host Cu-dominant, precious-metals-bearing, massive sulphide deposits, and mapping of the trenches had for goal to understand the mechanisms that brought the mineralization to the different rock units in the vicinity of the Gabbro-Greenstone rocks (gabbro contact) particular to the three main historical known zones, such as Beaver Pond, Main South Zone and East Zone.

## 2.0 Property, Location, and Access

The North Rock Property (*see* Figure 1) is located in northwestern Ontario, approximately 285 km west of the city of Thunder Bay and 25 km northeast of the town of Fort Frances. The property has been consolidated by staking and agreements, resulting in the amalgamation of 2 main blocks welded by series of contiguous claims, and called the North Rock block of claims and the Cousineau block of claims. It consists of 55 unpatented mining claims, totalling 331 units (5,296 hectares), 6 of which (42 units) are optioned from James E. Bond II, of Moorefield, West Virginia, U.S.A., and Aubrey Eveleigh, of Thunder Bay, Ontario. The property is located within western Halkirk Township (G-3808) and eastern Watten Township (G-3840), Kenora Mining Division, northwestern Ontario (*see* Figure 2). The claims are centred on Latitude 48°41'40"N, Longitude 93°05'00"W within NTS block 52C/11NE.

The property is easily accessed from Trans-Canada Highway 11, east of Fort Francis, Ontario, several forest access roads, a powerline access trail, and by boat from Grassy Portage Bay and Seine Bay of Rainy Lake. The eastern and north-eastern portions of the property are crossed by a powerline, the CNR rail line connecting Thunder Bay with Rainy River, and Highway 11. All claims are in good standing and are listed in Table 1, below.

## 3.0 Topography and Vegetation

Most of the property is heavily forested and exhibits gentle to moderate relief, with localized areas of select-cut logging. Elevation within the property varies between the elevation of Rainy Lake at ~1107 ft (337 m) and ~1300 ft (396 m) within the central portion of the property. Small- to medium-sized swamps and bogs are scattered throughout the property.

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The amount of exposed outcrop is variable, but usually ranges from 10 to 15%. Tree cover consists of mature stands of white pine, trembling aspen, white birch, white and black spruce, balsam, and locally red pine. The regions between outcrops are usually poorly drained and support a variable growth of black spruce, tamarack (larch), and tag alder. Rainy Lake occupies a small portion of the south-eastern claims.

CLAIM NUMBER	TOWNSHIP	# OF UNITS	SIZE Ha/a	RECORD DATE	DUE DATE	WORK REQUIRED	OWNERSHIP
1178125	Halkirk	2	32Ha/80a	2001-Oct-02	2008-Oct-02	\$800.00	Cousineau
1178889	Halkirk	2	32Ha/80a	1998-Feb-23	2008-Feb-23	\$800.00	Cousineau
1199262	Halkirk	1	16Ha/40a	2002-Apr-30	2008-Apr-30	\$400.00	Cousineau
1199263	Halkirk	3	48Ha/120a	2002-Dec-02	2007-Dec-02	\$1,200.00	Cousineau
1199264	Halkirk	15	240Ha/600a	2002-Dec-02	2008-Dec-02	\$6,000.00	Cousineau
1214877	Halkirk	2	32Ha/80a	2000-Jun-08	2008-Jun-08	\$800.00	Cousineau
1214878	Halkirk	2	32Ha/80a	2000-Oct-27	2008-Oct-27	\$800.00	Cousineau
1230786	Halkirk	4	64Ha/160a	1999-May-04	2007-May-04	\$1,600.00	Cousineau
1237557	Halkirk	6	96Ha/240a	2000-Mar-13	2007-Mar-13	\$2,400.00	Cousineau
1237828	East Watten	3	48Ha/120a	2004-Nov-03	2008-Nov-03	\$1,200.00	MTC
1237829	East Watten	4	64Ha/160a	2004-Nov-03	2008-Nov-03	\$1,600.00	MTC
1237857	East Watten	2	32Ha/80a	2004-Nov-03	2008-Nov-03	\$800.00	MTC
1237890	East Watten	1	16Ha/40a	2004-Nov-03	2008-Nov-03	\$400.00	MTC
1238152	Halkirk	6	96Ha/240a	2004-Dec-22	2008-Dec-22	\$2,400.00	MTC
1238153	Halkirk	4	64Ha/160a	2004-Dec-22	2008-Dec-22	\$1,600.00	MTC
1238154	East Watten	10	160Ha/400a	2004-Dec-22	2008-Dec-22	\$4,000.00	MTC
1238155	East Watten	15	240Ha/600a	2004-Dec-22	2008-Dec-22	\$6,000.00	MTC
1238156	East Watten	15	240Ha/600a	2004-Dec-22	2008-Dec-22	\$6,000.00	MTC
1238157	East Watten	10	160Ha/400a	2004-Dec-22	2008-Dec-22	\$4,000.00	MTC
1238158	East Watten	15	240Ha/600a	2004-Dec-22	2008-Dec-22	\$6,000.00	MTC
1238159	East Watten	2	32Ha/80a	2004-Dec-22	2008-Dec-22	\$800.00	MTC
1238160	East Watten	4	64Ha/160a	2004-Dec-22	2008-Dec-22	\$1,600.00	MTC
1238161	East Watten	1	16Ha/40a	2004-Dec-22	2008-Dec-22	\$400.00	MTC
1238162	East Watten	3	48Ha/120a	2004-Dec-22	2008-Dec-22	\$1,200.00	MTC
1238163	East Watten	2	32Ha/80a	2004-Dec-22	2008-Dec-22	\$800.00	MTC
1238171	East Watten	2	32Ha/80a	2005-Mar-03	2008-Mar-03	\$800.00	MTC
1238172	East Watten	16	256Ha/640a	2005-Mar-03	2008-Mar-03	\$6,400.00	MTC
1238173	East Watten	1	16Ha/40a	2005-Mar-03	2008-Mar-03	\$400.00	MTC
1240295	Halkirk	6	96Ha/240a	2002-Jan-03	2007-Jan-03	\$2,400.00	Cousineau
1245438	Halkirk	6	96Ha/240a	2003-May-06	2008-May-06	\$2,400.00	JB/EGC
1245439	East Watten	1	16Ha/40a	2003-May-06	2008-May-06	\$400.00	JB/EGC
1246517	Halkirk	2	32Ha/80a	2000-Nov-20	2008-Nov-20	\$800.00	Cousineau
1246518	Halkirk	6	96Ha/240a	2000-Nov-20	2007-Nov-20	\$2,400.00	Cousineau
1246845	Halkirk	15	240Ha/600a	2003-Dec-29	2008-Dec-29	\$6,000.00	EGC
1246846	East Watten	4	64Ha/160a	2003-Dec-29	2008-Dec-29	\$1,600.00	AE
1246847	East Watten	1	16Ha/40a	2003-Dec-29	2008-Dec-29	\$400.00	AE
1247174	Halkirk	15	240Ha/600a	2001-Jun-27	2008-Jun-27	\$6,000.00	JB/EGC
1249435	Halkirk	8	128Ha/320a	2002-Jan-21	2007-Jan-21	\$3,200.00	Cousineau
1249465	Halkirk	2	32Ha/80a	2002-Apr-30	2008-Apr-30	\$800.00	Cousineau
1249466	Halkirk	15	240Ha/600a	2002-Dec-02	2007-Dec-02	\$6,000.00	Cousineau
1249467	Halkirk	2	32Ha/80a	2002-Dec-18	2008-Dec-18	\$800.00	Cousineau
1249498	Halkirk	1	16Ha/40a	2000-Jan-21	2008-Jan-21	\$251.00	Cousineau
1249861	Halkirk	3	48Ha/120a	2001-Jan-26	2007-Jan-26	\$1,200.00	Cousineau
3004335	Halkirk	8	128Ha/320a	2002-Dec-18	2007-Dec-18	\$3,200.00	Cousineau
3004336	Halkirk	6	96Ha/240a	2003-May-12	2007-May-12	\$2,400.00	Cousineau
3005412	Halkirk	15	240Ha/600a	2004-Oct-28	2008-Oct-28	\$6,000.00	MTC
3005413	East Watten	15	240Ha/600a	2004-Oct-28	2008-Oct-28	\$6,000.00	MTC
3010796	Halkirk	9	144Ha/360a	2003-May-12	2007-May-12	\$3,600.00	Cousineau
3010797	Watten	4	64Ha/160a	2003-May-12	2007-May-12	\$1,600.00	Cousineau
3010799	Halkirk	2	32Ha/80a	2005-May-24	2008-May-24	\$800.00	Cousineau
3016162	East Watten	6	96Ha/240a	2006-Mar-10	2008-Mar-10	\$2,400.00	MTC
3016163	East Watten	8	128Ha/320a	2006-Mar-10	2008-Mar-10	\$3,200.00	MTC
3016164	East Watten	7	112Ha/280a	2006-Mar-10	2008-Mar-10	\$2,800.00	MTC
3004337	Halkirk	8	128Ha/320a	2005-Nov-18	2007-Nov-18	\$3,200.00	Cousineau
3010798	Halkirk	3	48Ha/120a	2005-Nov-18	2007-Nov-18	\$1,200.00	Cousineau
<b>TOTALS</b>		<b>331</b>	<b>5,296Ha/21,160</b>			<b>\$132,251.00</b>	

Table 1: North Rock Property. Claims Status.

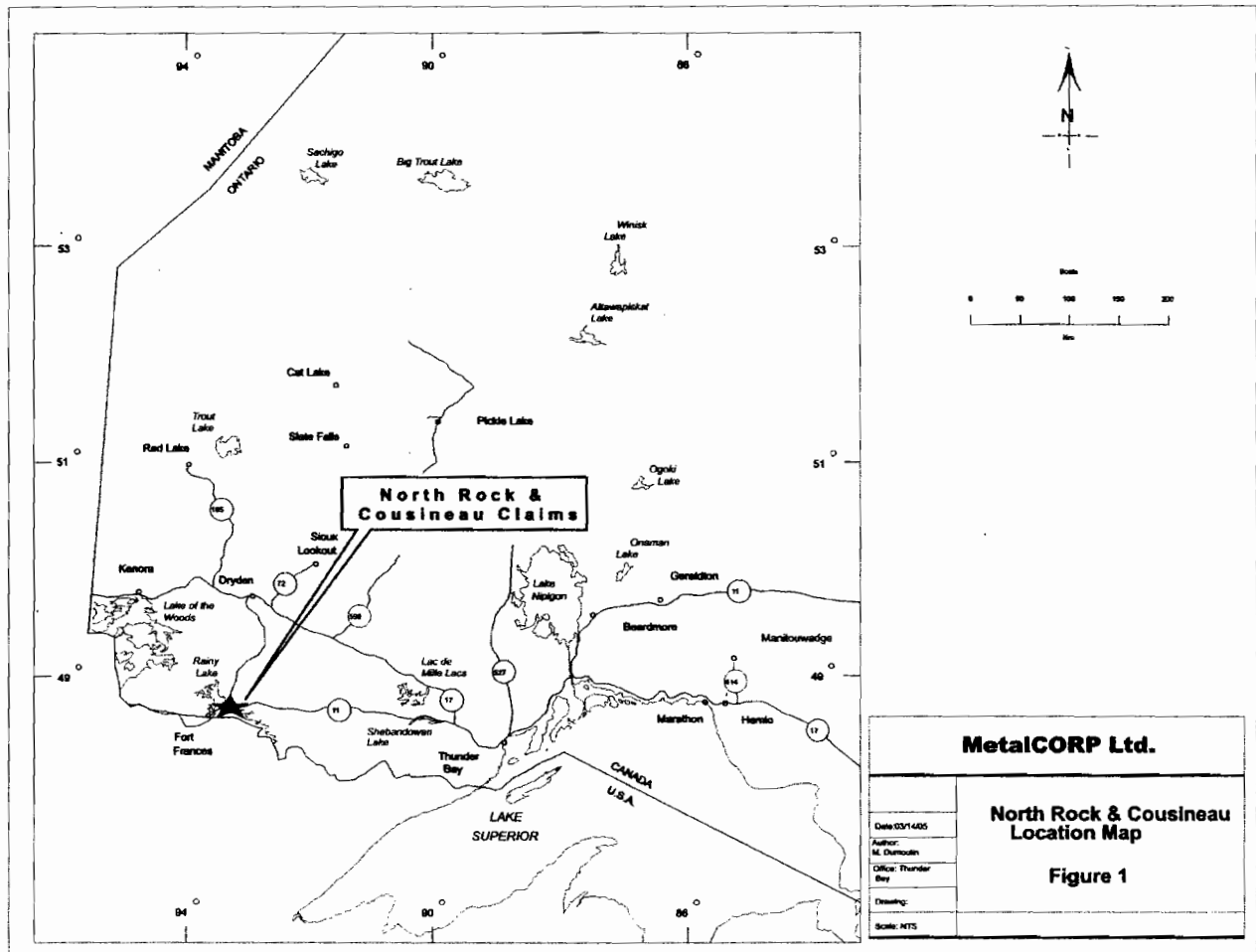


Figure 1: Ontario Location Map



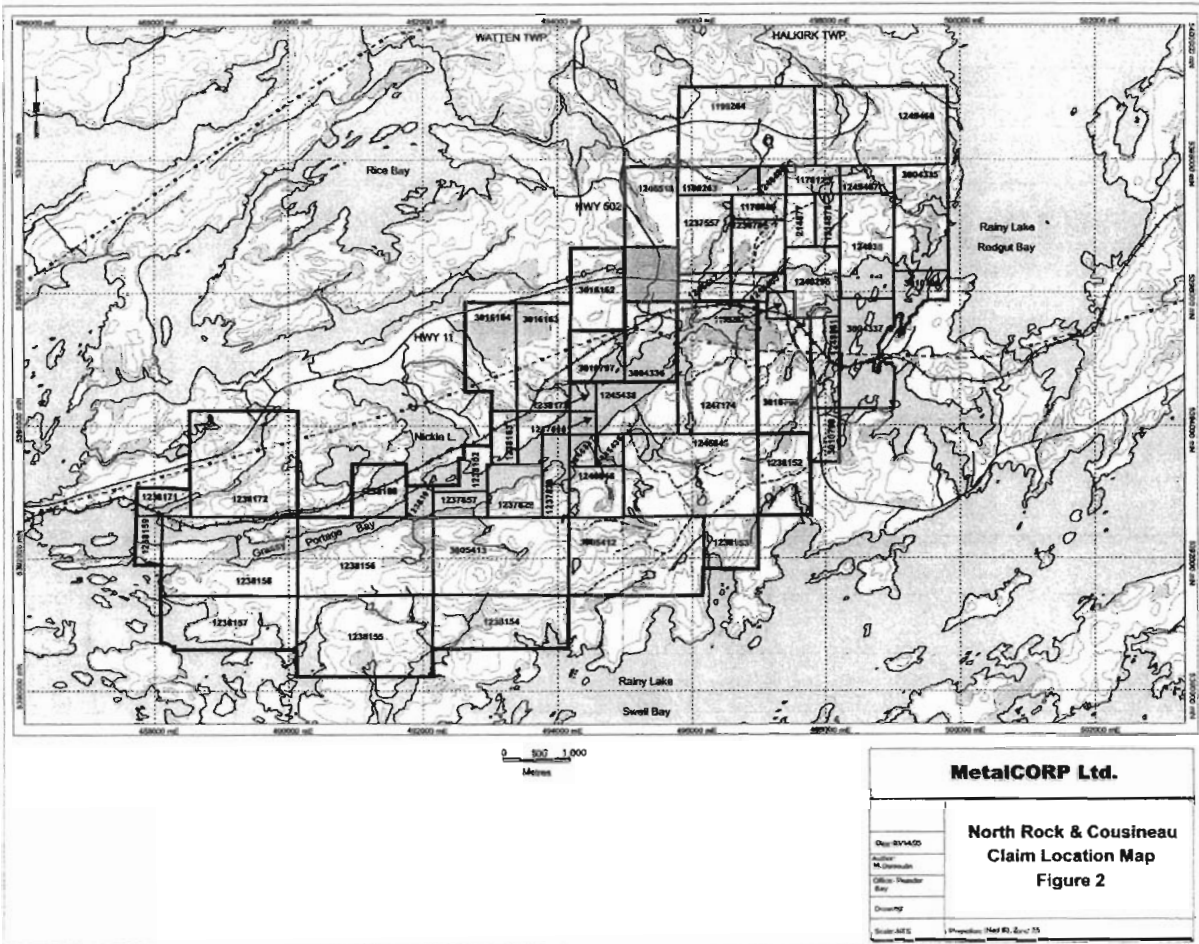


Figure 2: Property-Scale Location Map and Claim Disposition

#### 4.0 Regional Geology

The North Rock Property is located within the central, Archean-age, Fort Francis-Mine Centre Greenstone Belt within the southernmost portion of the western Wabigoon Subprovince (Blackburn et al. 1991) (see Figure 3). Poulsen (2000) describes the region as a fault-bound, structurally discordant wedge forming a boundary zone between the Wabigoon Subprovince granite-greenstone terrane, to the north, and the Quetico Subprovince metasedimentary terrane, to the south. Its north and south boundaries are defined by the Quetico Fault Zone (up to 1 km wide) and the Rainy Lake-Seine River Fault, respectively, and is generally considered to be part of the Wabigoon Subprovince. The wedge stretches from the Ontario-Minnesota border in the west, to near Flanders (Calm Lake area), in the east, where the northeast-trending Rainy Lake-Seine River fault system merges with the east-west-trending Quetico Fault Zone. The unit descriptions below are primarily derived from Poulsen (2000), Wood (1980), and Harris (1974), and will be confined to the discordant, boundary zone wedge (The Boundary Zone).

Andesitic to basaltic metavolcanic rocks are common and are often intruded by numerous, possibly sub volcanic, medium-grained gabbroic dykes and sills of highly variable thicknesses (<50 to



locally >300 m). The flows are locally intercalated with ultramafic, intermediate, and felsic metavolcanic rocks, particularly in the Rice Bay and Shoal Lake areas. Narrow units of interflow clastic metasedimentary rocks, chert, and sulphidized oxide-facies iron formations are locally common.

Elongate, chloritized, dacitic to andesitic intermediate metavolcanic units, often intercalated with mafic and felsic metavolcanic rocks, are observed in several areas: a narrow, northeastward-trending band from Sandpoint Island, in Rainy Lake south of Swell Bay, to Mine Centre; several thicker units wrapping around the Rice Bay Dome; and several units in the Prospect Bay and eastern Swell Bay areas. The units often exhibit clastic textures, are locally amygdaloidal, and may be, in part, sub-aerial.

Rhyolitic to dacitic, felsic metavolcanic flows and pyroclastic rocks, intercalated with some intermediate and mafic metavolcanic rocks and often intruded by gabbroic dykes and sills, form a northeastward-thickening unit beginning south of Swell Bay and continuing east of Mine Centre. Flows are common near Mine Centre with pyroclastic rocks more abundant as the unit thins to the southwest.

The Redgut Bay-Grassy Portage area is host to an unusual, moderately to strongly magnetic, probably extrusive, in part pyroclastic, tremolitic, ultramafic unit locally characterized by fine (up to 15 cm diameter), subround to angular clasts within a fine-grained, magnetite- and tremolite-rich, locally talc-rich matrix. The main portion of this northeast-trending unit is between 300 and 800 m in width and approximately 5.6 km in length. Whole rock lithogeochemistry by Poulsen (2000) suggests that it has a komatiitic affinity. Narrow, usually <100 m thick, concordant units are often intercalated with the mafic metavolcanic and intrusive rocks surrounding the eastern Rice Bay Dome.

Two extensive units composed of feldspathic wacke and mudstone, rarely feldspathic arenite to quartz arenite (Coutchiching metasediments), occur within the Boundary Zone. The least extensive partially encircles the Rice Bay Dome and is between 100 and 1200 m in thickness. The other forms a thick, extensive, arcuate band between 3.0 and 6.5 km in thickness, that extends eastward from the southwestern shore of Rainy Lake, through Swell Bay, then arcs northeastward through Bear Passage and into Redgut Bay. This unit is regularly intruded by late, granitic to granodioritic stocks and plutons.

The coarse clastic rocks of the Seine Metasediments are extensively exposed in the Shoal Lake area and much less extensively exposed near Rice Bay. These rocks are characterized by coarse, heterolithic, clast-supported conglomerate, interbedded conglomerate and arenite, arenite, and minor siltstone. Clast size decreases with stratigraphic height. Wood (1980) interprets these coarse clastic metasedimentary rocks as an alluvial fan merging into a braided fluvial terrane. North of Shoal Lake the basal conglomerates rest unconformably on coarse-grained tonalite and intermediate metavolcanic rocks. These rocks are locally intruded by quartz-feldspar porphyry sills or dykes.

Two large, systematically differentiated, sill-like, variably layered, melagabbroic to anorthositic mafic intrusions dominate the Boundary Zone. The largest is the Seine Bay-Bad Vermillion Intrusion which is over 40 km in length and up to 5 km in width. It extends from Sandpoint Island of Rainy Lake, in the southwest, to the northeastern corner of Bad Vermillion Lake, in the northeast. Rhythmic modal layering is locally well-exposed. The intrusion is often flanked, and locally intruded by, metamorphosed tonalitic to leucotonalitic plutons. The base of the intrusion, in the Bleak Bay-Little Grassy Bay area, is truncated by the Rainy Lake-Seine River Fault. The smaller, arcuate, Grassy Portage Intrusion is approximately 21 km in length, up to 2.2 km in width, and extends from Commissioners Bay, in the west, to Baseline Bay, in the north. Diffuse modally graded layering and rare flame structures suggest that the Grassy Portage Intrusion is southward-facing, whereas, internal differentiation and modal grading within the Seine Bay-Bad Vermillion Intrusion suggests that it is northward-facing.

The Boundary Zone is intruded by 2 types of granitoid bodies. An older metamorphosed, often broadly conformable, usually gneissic, often sill-like group of intrusions, historically referred to as Laurentian-type granitoids and a younger, compositionally different, rarely foliated, series of discrete stocks and plutons that have been historically referred to as the Algoman-type granitoids. The older Laurentian-type bodies are represented by the sill-like Mud Lake Trondhjemite, the Bad Vermillion Tonalite, and several smaller bodies spatially associated with the Seine Bay-Bad Vermillion Mafic Intrusion; the Rice Bay Dome, composed of granite and quartzo-feldspathic gneiss, in the Rice Bay area; and the pear-shaped, texturally heterogeneous, strongly gneissic Black Sturgeon Bay Intrusion, located north of the Rice Bay Dome. The relatively numerous, primarily granitic to granodioritic, Algoman-type intrusions vary greatly in size and shape and include, in roughly decreasing order of size, the granitic to granodioritic Ottetail Lake Intrusion; the granitic to granodioritic Rocky Islet Bay and Hopkins Bay intrusions located west of the Rice Bay Dome; and the Rest Island, Blind Bay, Bear Passage, and Baseline Bay intrusions that form a string of stocks and plutons intruding the southern band of Coughtiching-type metasedimentary rocks.

Most Boundary Zone supracrustal rocks, mafic intrusive complexes, and subvolcanic mafic dykes and sills have attained upper greenschist-facies regional metamorphic grade with regions adjacent to internal granitoid stocks and plutons reaching lower- to locally mid-amphibolite grade. Lower amphibolite-grade contact metamorphism is also commonly observed adjacent to the 2 large mafic igneous complexes.

All rock-types observed are cross-cut by northwest-striking, ~2200 Ma, quartz diabase dykes of the Kenora-Fort Francis swarm (Osmani 1991). Biotitic lamprophyres are observed locally.

Poulsen (2000) has noted evidence for at least 3, possibly progressive periods of deformation involving folding, shearing, and faulting. These structures record the transition from ductile to brittle deformation dominated by incremental shortening about a west-northwest oriented, sub-horizontal axis which imparted a dominantly northeast-trending grain to the region.

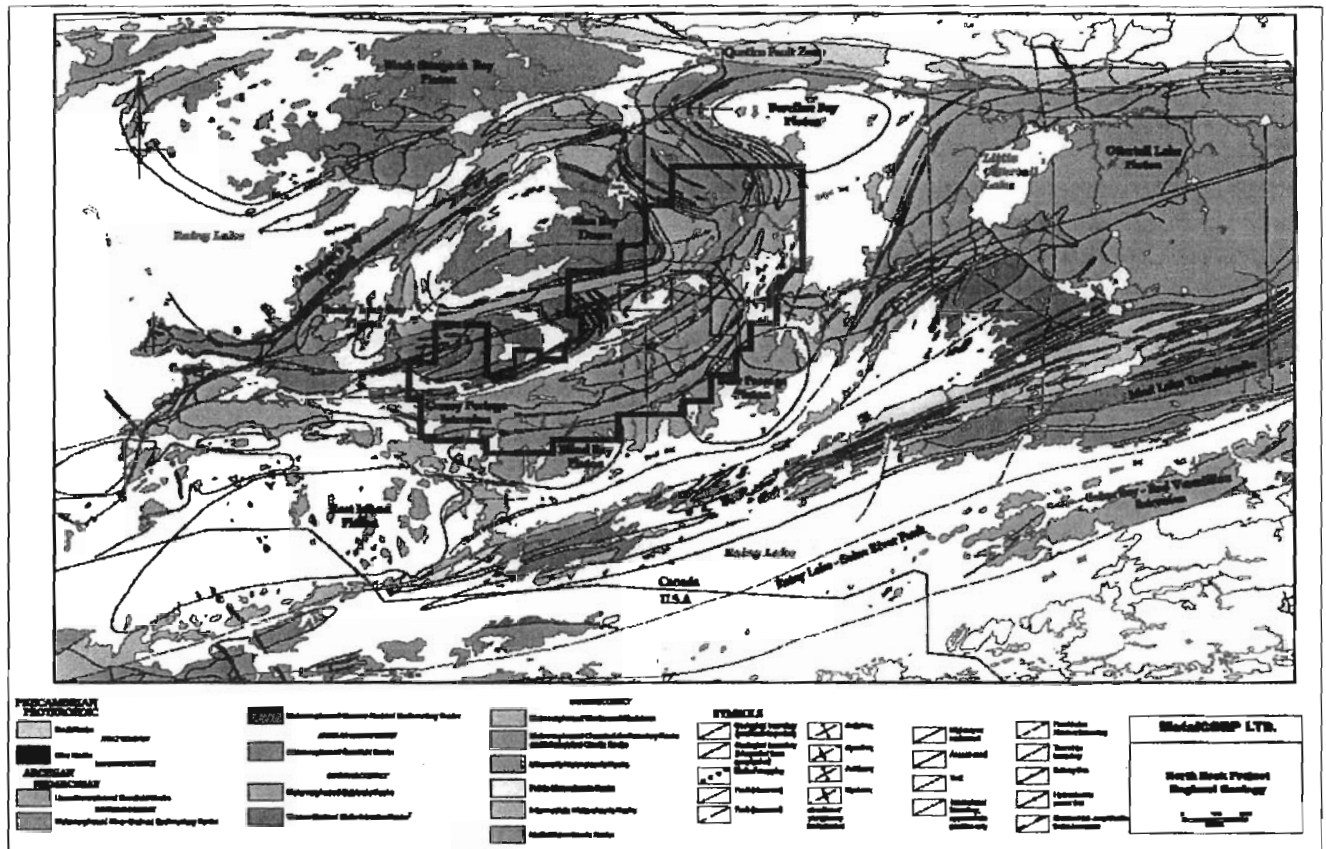


Figure 3: Regional Geology Map

## 5.0 Exploration History and Government Surveys

There is a long history of base metals exploration within the North Rock area, with the earliest recorded work occurring in 1918, with possible, unrecorded work as early as 1902. Research suggests that there has been little exploration for the platinum group elements (PGE's) and only minor interest in Au. Most of the exploration activity occurred between 1958 and 1978 and was sporadic before or since.

Previous exploration and government surveys in the vicinity of the North Rock Property, as researched from the Resident Geologist's Assessment Files, (Kenora Mining Division, Ontario Geological Survey), Kenora, and Ontario Geological Survey reports are summarized below. Many of the occurrences present within and nearby the property are also described below and are shown on Map 1 (see Back Pocket).

**1887:** The first geological mapping of the area was completed *A.C. Lawson*, of the Geological Survey of Canada, at a scale of 1"=2 miles.

from, the Nickel Lake Prospect and is presently contained within 2 patented claims a short distance north of the of the present North Rock claims. No analytical results are available.

**1918?:** Several pits and trenches were excavated by unknown parties, circa 1918, on the **Sims Station Occurrence**, which is located within the northwestern portion of the present North Rock claims.

**1951:** *Brudon Enterprises* excavated at least 3 pits at uncertain locations east of Nickel Lake. These pits may have been completed on, or near, the **McTavish No 1 and 10 Trenches**.

**1958 to 1970:** During 1958 *Noranda Mines Limited* rehabilitated several of the trenches sunk circa 1918 on the **Sims Station Occurrence**, located near the western end of Grassy Portage Bay within the northwestern portion of the present North Rock Property. That same year Noranda drilled 4 holes, totalling 282 ft (85.9 m), to test the occurrence and similar mineralization located along-strike to the west. Mineralization consisted of a well-mineralized unit of bedded clastic and chemical metasedimentary rocks, flanked by gabbro, containing up to 90% massive pyrite, bands of magnetite, and variable amounts of chalcopyrite. A massive sulphide sample taken by Harris (1974) contained **0.33% Cu** and one drill intersection from beneath the trenches contained **0.60% Cu/5.0 ft (1.52 m)**. A hole drilled 400 m to the southwest (**Sims South Occurrence**) intersected **0.20% Cu/7.0 m**. The southern shoreline of Grassy Portage Bay was geologically mapped in 1966 in an effort to determine the location of the basal contact of the Grassy Portage Intrusion. Two holes, totalling 846 ft (257.9 m), were drilled in 1967 near the southern shoreline of Grassy Portage Bay. No significant intersections were obtained from these holes. During 1969 and 1970 Noranda completed linecutting, ground magnetometer and JEM surveys, excavated a large pit, and drilled 6 holes, totalling 2385 ft (726.9 m), in the vicinity and to the west of the Sims Station Occurrence. This work was completed on disseminated to massive pyrite, pyrrhotite, and chalcopyrite occurring within an intercalated sequence of clastic metasedimentary rocks, mafic metavolcanic flows, and oxide- and sulphide-facies banded iron formation. A sample of sulphide-facies iron formation taken by Harris (1974) from a 30 m trench (**Smith's Point Occurrence**) contained **0.30% Cu**. One drill hole tested a sulphide iron formation 60 m south of the trench and intersected 2 zones grading **0.22% Cu/7.0 m and 0.22%/13.0 m**, respectively (**Smith's Point South Occurrence**).

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**1902, 1918 to 1919, 1958:** A sulphide-rich iron formation (**Nickel Lake Prospect**) was discovered near the south shore of Nickel Lake during construction of the southern branch of the Canadian National Railway (CNR) in 1902. There were unconfirmed reports that an exploratory diamond drill hole was completed that same year by an unknown party. During 1918 and 1919 the *Nickel Lake Mining Company* brought the 7 claims to patent and sank a 75 ft (23 m) shaft, with a 35 ft (11 m) cross-cut, a short distance north of the tracks, <100 m west of present North Rock Property Claim K1238163. Mineralization consisted of massive pyrite and pyrrhotite, with minor chalcopyrite and sphalerite, within black shale directly adjacent to oxide-facies iron formation. Disseminated chalcopyrite and pyrrhotite were also noted within amphibolite adjacent to the iron formation; however, no assays are available. During 1958 *Cliffs of Canada Limited* completed a reconnaissance magnetic survey.

**1911:** *A.C. Lawson*, of the *Geological Survey of Canada*, remapped the area at a more detailed scale (1"-1 mile) and introduced some of the original Precambrian nomenclature of the area.

**1918:** Unknown parties excavated several pits and trenches on a sulphide-facies iron formation containing between 5 and 25% semi-massive, banded to bedded pyrite (**Wallace Occurrence**). The host iron formation unit is located approximately 2150 m south-southwest, and along strike

**1958 to 1974, 1990:** The mineralization comprising the **Main South Cu Zone** was discovered in 1958 a short distance south of Grassy Portage Bay by L. Turcotte, a prospector working for *Noranda Mines Limited*. The resulting 60 claim property comprised what is now the northeastern half of the North Rock Property. Between 1958 and 1970 Noranda flew an airborne magnetometer and EM survey and completed trenching, linecutting, geological mapping, ground magnetometer, JEM, and VLF-EM surveys, 16 diamond drill holes (1845 m) in 1959 and 1960, and 31 holes (3563 m) in 1966 and 1967. The 1959 drilling was primarily confined to the lenticular Main South Zone, with 2 holes on the **East Zone** (~875 m to the northeast), and intersected mineralization containing **1.5 to 4.5% Cu/2.0 to 20.0 m** over a strike length of approximately 400 ft (120 m). Much of the remaining drilling tested the **Beaver Pond Zone**, located 150 m to the southwest of the Main South Zone. This zone consisted of en echelon masses of Cu-rich, disseminated to net-textured chalcopyrite with subordinate pyrrhotite and localized disseminated molybdenite. The molybdenite occurs as intergrowths with chalcopyrite and pyrrhotite or as discrete grains within grey patches of hydrothermally altered gabbro. Grades vary from **<1% to >3% Cu/variable widths** over a strike length of ~400 m. *Seemar Mines Limited* optioned the 7 leases and 11 unpatented claims covering the Beaver Pond and Main South zones from Noranda in 1968. Seemar drilled 16 holes, totalling 7811 ft (2380.8 m), during 1969 and 1970. The claims were brought to lease in 1970 and a tonnage and grade estimate of **276,172 tons grading 2.00% Cu** was calculated, with a possible additional resource of **148,000 tons grading 0.99% Cu**. Seemar entered into an agreement with *North Rock Explorations Limited* in 1971 in order to finance continued exploration. North Rock drilled 17 infill holes during 1971 and 1972. This was followed in 1972 and 1973 by a limited underground development program comprising a 200 ft (61 m) shaft and 700 ft (213 m) of drifting on the 175 ft (53 m) level. The drift exposed **2 Cu-rich zones that averaged in excess of 3.00% Cu**. Work ceased in 1973 and the property was turned over to the new *Nor-Norrock Mining Company Limited*, who commissioned an independent appraisal of the property (Bergman 1973). Tonnage and grade calculations, completed by Bergman include **1,020,458 tons grading 1.17% Cu** over a 400 m strike length and **265,230 tons grading 2.08% Cu** over a 300 m strike length. Both estimates were good to a depth of only 91 m. The host-rock for most of the observed mineralization within the Beaver Pond and Main South Zones was variably altered leucogabbro (grey ore), gabbro, coarsely plagiophyric to glomero-plagiophyric gabbro, and melagabbro (black ore). The East Zone drilling intersected **0.233% Cu/70 m, including 0.425% Cu and 0.044% MoS<sub>2</sub>/20 m**. Nor-Norrock completed a single, 251 ft (76.5 m) drill hole in 1974 south of the leases and intersected 50 ft (15.24 m) of disseminated pyrrhotite (no assays are available). Nor-Norrock commissioned *J.E. Steers and Associates Inc.* to prepare an independent report on the property in 1990 which gave a positive assessment of the potential of expanding the existing resource. No known exploration was completed on the leased claims after 1973 and they were allowed to lapse on June 1, 1999.

**1959:** *J. Galbraith* completed 4 diamond drill holes, totalling 282 ft (85.96 m), on the Sims Station Occurrence, located near the western end of Grassy Portage Bay. No assays are available.

**1959 to 1966:** *Noranda Exploration Company Limited* completed linecutting, magnetometer and EM surveys, geological mapping, and 15 diamond drill holes, totalling 3566 ft (1086.9 m), on 3 options that partially overlapped the eastern boundary of the present North Rock Property and with the bulk of the claims within the adjacent Cousineau Property, also owned by MTC. The claim groups included the present Belacoma North, South, and West occurrences, the Redgut Bay Occurrence, and probably included the Hupchuk, Hupchuk-Grassy Portage Bay, and Belacoma Trax occurrences.

**1959 to 1967:** *PCE Explorations Limited* staked 36 claims in 1959 immediately west and southwest of MetalCorp Ltd.

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the Noranda Grassy Portage Bay Property within the core of the present North Rock Property. PCE optioned the claims that same year to *Noranda Mines Limited* who completed linecutting, geological mapping, ground Junior-EM (JEM) and magnetometer surveys, and 2 diamond drill holes (23 and 24), totalling 765 ft (233 m). A single hole (67-4) was drilled in 1967.

**1963 to 1970, 1973 to 1974:** A 30 claim property was staked in 1963 by *T. Daley and J.A. Galbraith*, immediately west of the Nickle Lake patents, to cover massive sulphide mineralization discovered during the construction of Highway 11. Between 1964 and 1970 the owners completed prospecting, trenching, and 35 diamond drill holes, totalling 4162 ft (1268.6 m). The *Galbraith-Daley Mining Company* was formed in 1970 to manage the property. Three zones of sulphide mineralization were discovered, only 2 of which have assays available. The original zone, the **Daley-Galbraith 1 Occurrence**, consisted of a 1 to 2 m thick lense of massive pyrite, pyrrhotite, and minor chalcopyrite within siliceous chemical metasedimentary rocks thought to represent sulphide-facies iron formation. An ODM surface sample (Harris 1974) contained only trace Cu and Ni. An 8 ft (2.43 m) core intersection from a hole drilled approximately 530 m along strike to the east contained **0.32% Cu and 0.21% Ni**. The **Daley-Galbraith 3 Occurrence**, located approximately 1000 m to the southeast of the #1 occurrence, contained abundant pyrrhotite and minor chalcopyrite within well-foliated to schistose gabbro that graded **0.42% Cu, 0.17% Ni, and 0.20% Zn**.

**1963 to 1968, 1980:** A 23 claim property east of Grassy Portage Bay was staked in 1963 by *M. Hupchuk and G. Armstrong*. The claims included a previously trenched Cu-Ni occurrence (**Hupchuk Occurrence**), located a short distance northeast of Highway 11, at the lower contact of the Grassy Portage Intrusion. All of the property is now included within the present Cousineau and North Rock properties and straddled the boundary between them. The owners completed prospecting and trenching in at least 3 separate areas. Chip samples of gabbro taken from the Hupchuk Occurrence trench by the ODM (Harris 1974) were described as similar to the 'black ore' of the Beaver Pond Deposit and contained **0.20% Cu and 0.13% Ni/90 ft (27.4 m)**. A portion of the claims were optioned in 1963 to *Phelps-Dodge Corporation of Canada, Limited* who completed geological mapping and 12 diamond drill holes. Two of the holes (H6 and H7), totalling 729 ft (222 m), tested the Hupchuk Occurrence. The company dropped the option late in 1963. The owners drilled a 228 ft (69.5 m) hole south of east end of Grassy Portage Bay in 1964. *Noranda Mines Limited* optioned the western part of the property in 1966 and drilled a 2 hole fence (N79 and N80) on what is now the **East Cu-Ni Zone** on the presently adjacent North Rock Property. During 1967 and 1968 the owners drilled 4 holes, totalling 1145.6 ft (349.2 m), on various parts of the property. Two holes tested the eastern extension of the Hupchuk Occurrence; however, no assay results are available. The property may have been optioned to *Kerr Addison Mines Limited* in 1970 and to *Hudson Bay Exploration and Development Company, Limited* in 1972. Kerr completed a 170 ft (51.8 m) drill hole in 1970, in the vicinity of the Belacoma North Occurrence, and Hudson Bay completed linecutting and an EM-17 survey in the same area in 1972. The owners completed 2 holes south of Highway 11 in 1980.

**1963 to 1979:** The **Mironsky Cu Zone** was discovered by *M. Hupchuk* in 1963 during the construction of Highway 11. The mineralized zone was staked by *A. Mironsky* shortly thereafter and the 20 claims were quickly optioned to *Phelps-Dodge of Canada, Limited*. The claims would have been located immediately east of the present southeastern North Rock Property boundary and may have partially overlapped it. Phelps Dodge completed linecutting, geological mapping, ground magnetometer and Ronka EM, and 12 diamond drill holes, totalling 3754 ft (1144.2 m), that same year. Eight of the holes (A1 to A8), totalling 3030 ft (923.54 m), tested the Mironsky Zone and outlined a 250 m long, 10 m thick zone of disseminated chalcopyrite and



pyrrhotite within a siliceous schist near the southeastern (upper) contact of the Grassy Portage Intrusion. Drill hole B-3 intersected **1.23% Cu/11.0 m**. Harris (1974) estimated that the drilling outlined **~300,000 tons grading 0.80% Cu**. Phelps-Dodge dropped the option late in 1963. **Kerr Addison Mines Ltd.** optioned part of the property in 1975. They completed several trenches and 2 drill holes, totalling 629 ft (191.7 m), on the Mironsky Zone during 1975 and 1976. **M. Hupchuk and G. Armstrong** excavated several trenches, approximately 750 m southwest of the Mironsky Zone, in 1975 and a 359 ft (109.4 m) drill hole (92-78) in the same area in 1978. The property was optioned to **Belacoma Mines Limited** in 1978 who drilled 11 holes on the Mironsky Zone and then dropped the option. The owners drilled 4 more holes (91-78, 93-78 to 95-78), totalling 1600 ft (487.7 m), in the southwestern portion of the property in 1979.

**1964:** The area was geologically mapped, at a scale of 1"=1 mile, by **J.C. Davies** of the **Ontario Department of Mines**.

**1965 to 1968, 1978, 1983:** A 21 claim property was staked north of Traverse Inlet of Swell Bay, Rainy Lake, in 1965 by **M. Hupchuk and G. Armstrong**. The property, located within the south-central portion of the present North Rock claims, was optioned in 1966 to **Cominco Ltd.** Cominco completed linecutting and geological mapping that same year. Magnetometer, IP-EM, and resistivity surveys were completed in 1967. After the option agreement was allowed to expire in 1968 the owners drilled 2 holes, totalling 1294 ft (394.4 m), to test one of the Cominco IP anomalies. The first hole intersected 30 ft (9.1 m) containing up to 10% pyrrhotite, chalcopyrite, and sphalerite (**Traverse Inlet Occurrence**) that graded **2.53% Zn and 0.11% Cu/10 ft (3.05 m)**. A 28 ft (8.53 m) interval in the second hole (drilled at 180° to the first) contained some pyrrhotite, chalcopyrite, and sphalerite. No further work was recorded until 1978 when the owners completed outcrop stripping and 4 diamond drill holes (91, 93 to 95). The property may have been optioned to **Corporation Falconbridge Copper** in 1983 when a 182 ft (55.5 m), drill hole (177-IT) was completed northeast of the Traverse Inlet Occurrence. Poulsen (2000) reports that a sample of oxide-rich material from the property (location uncertain) contained 33.5% FeO (total iron) and 2.50% TiO<sub>2</sub>.

**1966:** An airborne EM and magnetometer survey was completed over a large area by **Noranda Mines Limited**.

**1966 to 1968:** A small property was staked by **B. Weiss and W.J. Cooper** to the southeast of the MacTavish occurrences and included the historic trenches excavated by the East Burdon Group in 1951. The surface trenches were reported to contain up to 25% pyrite and pyrrhotite at the contact between fine-grained gabbro and chloritic metasedimentary rocks. The owners drilled a 103 ft (31.4 m) hole near the CNR tracks that contained disseminated pyrite, pyrrhotite, and chalcopyrite, but no analytical results are available (**Weiss-Cooper Occurrence**).

**1966 to 1969, 1983:** **M. Hupchuk and G. Armstrong** staked a group of 19 claims to the north and northwest of the Hupchuk Occurrence after discovering malachite staining in outcrop. The property included much of the northern half of the present Cousineau Property and part of the northeastern portion of the present North Rock Property. The owners excavated several pits and trenches on the new occurrence (**Hupchuk-Grassy Portage Bay Occurrence**), drilled a 50 ft (15.2 m) hole, and exposed a northwest-trending, 10 ft (3 m) thick zone, over a strike-length of 100 ft (33.5 m). Observed mineralization consisted of disseminated pyrrhotite and chalcopyrite along the margins of a gabbro dyke/sill within an ultramafic pyroclastic unit. Four trenches were also excavated in the vicinity of the **Belacoma South Occurrence**, located 780 m to the northwest. The property was optioned in 1967 to **North 60 Explorers Limited** who completed

linecutting, magnetometer and IP-EM/resistivity surveys, and 5 diamond drill holes (H1 to H3), totalling 3139 ft (956.8 m). The drilling tested 2 of 3 IP anomalies, with the northernmost hole (H1) intersecting undisclosed amounts of disseminated pyrrhotite and chalcopyrite. No assay results are available. The owners completed a single drill hole, totalling 218 ft (66.4 m), north of the Hupchuk-Grassy Portage Bay Occurrence and a short distance north of Highway 11, in 1978. Two holes, totalling 588 ft (179 m), were completed on the Hupchuk-Grassy Portage Bay Occurrence in 1983. No assay results are available.

**1966 to 1969:** A 25 claim group owned by *Paramacque Mines Limited* was located west of, and partially overlapped, the western boundary of the present Cousineau Property, east of Nickel Lake, a short distance north of the North Rock Property. Paramacque completed linecutting, geological mapping, ground magnetometer and EM surveys (McPhar 1000/5000), and six diamond drill holes, totalling 2012 ft (613.3 m), that tested 3 mineralized zones. Drilling of the southernmost zone (**Paramacque Zone**) intersected 2 intervals grading **1.39% Cu/2 ft (0.6 m) and 0.60% Cu/3.5 ft (1.1 m)**, respectively, within a lean iron formation containing considerable pyrrhotite and some chalcopyrite.

**1966 to 1969:** *Noranda Mines Limited* completed linecutting, ground magnetometer and EM surveys, and drilled 2 holes, totalling 410 ft (125 m), on a property located west and northwest of the Daley-Galbraith occurrences (west and northwest of Nickel Lake). One hole, located a short distance north of Highway 11, intersected **0.55% Zn/2.7 m (Moosehorn Occurrence)** within black shale containing some sphalerite, pyrite, and pyrrhotite.

**1968 and 1969:** The Rainy Lake area was mapped at 1:15840 scale by *F.R. Harris* of the *Ontario Division of Mines*. Harris noted the presence of disseminated molybdenite and pyrite within a 300 ft (90 m) wide zone associated with the southeastern contact of the Rice Bay Dome and adjacent migmatized biotite-quartz schist (**Highway 11 Occurrence**). The molybdenite occurred within quartz veins, along fractures, or disseminated throughout granitoid and metasedimentary host-rocks. No assays are available. The occurrence is within the western edge of the present Cousineau Property.

**Pre-1969:** At least 6 trenches and pits were excavated by *J. Levar* on 4 patented claims located a short distance northwest of the present northwestern-most North Rock claims. Three trenches, located 400 m north of Highway 11, exposed locally massive to laminated pyrrhotite, pyrite and minor chalcopyrite within sulphide facies iron formation hosted by deformed pillowed mafic metavolcanic flows (**Kotnick North Occurrence**). A large trench exposed another sulphide facies iron formation, located 60 m south of Highway 11, that contained massive and disseminated pyrite, pyrrhotite, and some chalcopyrite (**Kotnick South Occurrence**). A sample taken by Harris (1974) from this trench assayed trace Cu and Ni.

**1969:** A 19 claim property was staked, circa 1969, southwest of the Beaver Pond Zone by *G. Laberge* and included the original P.C.E. Property optioned by Noranda in 1958. Four trenches were excavated that same year near the shoreline of a bay approximately 700 m southwest of the Beaver Pond Zone shaft.

**1971 to 1976:** A property, located immediately to the north of the Hupchuk and Hupchuk-Grassy Portage Bay occurrences, was acquired between 1971 and 1973 by *Belacoma Mines Limited*. Prospecting, several trenches, and 2 diamond drill holes, totalling 601 ft (183.2 m), were completed between 1971 and 1973. The property was optioned to the *Canadian Nickel Company Limited* (Canico) in September 1973. During 1973 and 1974 Canico completed

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linecutting, geological mapping, ground magnetometer and EM surveys, and 3 diamond drill holes, totalling 986 ft (300.5 m). A 1974 drill hole completed on the **Belacoma North Occurrence** intersected **0.45% Cu and 0.12% Ni/0.55 m**. The option was dropped in 1974. During 1975 and 1976 Belacoma completed additional trenching and 8 drill holes. The work completed between 1971 and 1976 defined the locations of the **Belacoma North, South, and West occurrences**. Grab samples from the Belacoma West Occurrence contained **0.29% Cu, 1.23% Ni, and 0.17% Co** and a drill intersection from the same zone graded **0.22% Ni, 0.08% Cu/8.62 m**.

**1972:** A property of unknown size was staked by **R.W. Cousineau** circa 1972. He excavated 3 trenches a short distance south of Highway 11, north of the Hupchuk-Grassy Portage Bay Occurrence. The property may have been optioned to **Hudson Bay Exploration and Development Company Ltd.** that same year who completed linecutting and a Geonics EM-17 HLEM survey over one of the claims.

**1972 and 1973, 1976 and 1977:** **K.J. and J.G. McTavish** staked a 12 claim property located to the east and northeast of Nickel Lake in 1972. They completed prospecting, excavated several pits and trenches, and then optioned the claims to **Noranda Mines Limited** in the spring of 1972. During 1972 and 1973 Noranda completed linecutting, geological mapping, ground magnetic, VLF-EM, and HLEM surveys, and 2 diamond drill holes, totalling 635 ft (193.5 m). The drill logs were not submitted for assessment. The **McTavish Trench 1 Occurrence**, located midway between Highway 11 and Nickel Lake, exposed intercalated impure marble, pyrite- and pyrrhotite-bearing recrystallized chert, and pyritic shale containing sphalerite and minor chalcopyrite. Grab samples taken from this trench contained up to **4.0% Zn and 1.4% Cu** with chip samples containing **0.3% Zn and 0.12% Cu**. Diamond drilling beneath the trench intersected **0.22% Zn, 0.13% Cu/3.0 m and 0.14% Zn and 0.12% Cu/4.0 m**. The **McTavish Trench 10 Occurrence**, located about 1220 m to the east-southeast of Trench 1 near the CNR tracks, exposed lean oxide-facies iron formation adjacent to a black siliceous rock containing moderate amounts of chalcopyrite, pyrrhotite, and magnetite. Noranda drilling to test Trench 10 intersected **0.18% Cu/5.6 m**. During 1976 and 1977 several trenches were excavated, geological mapping program was completed of the western portion of the property, and 4 holes, totalling 1475 ft (449.6 m), were drilled to test Trench 10. No assay results are available from this work.

**1973:** A 39 claim property was staked west of Moosehorn Lake by **V. Borschneck**, circa 1973. He completed linecutting and VLF-EM and magnetometer surveys.

**1974:** Two shallow drill holes, totalling 640 ft (195 m), were drilled by **S.J. Duggan** southwest of the Beaver Pond Zone (location uncertain). No sulphide mineralization was noted in the drill logs and no assay values are available.

**1976:** The area bound by Rice Bay, in the northwest, and Bear Passage, in the southeast, was mapped at reconnaissance and detailed scales by **K.H. Poulsen** (1980 and 1981). This work provided the basis of Poulsen's M.Sc. and Ph.D. theses and several **Ontario Geological Survey** publications.

**1978:** A 19 claim group was staked by **R.W. Cousineau** to cover the Mironsky Zone. A single, 271 ft (82.6 m) drill hole (no available assays) was completed on the Mironsky Zone near Highway 11. There is no record of whether any further work was completed on the claims.

**1979 and 1980:** The **Ontario Geological Survey** commissioned a Questor Surveys Limited airborne EM and magnetometer survey over the Atikokan-Mine Centre area that included the Grassy

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Portage Bay area.

**1980 to 1984, 1990:** A group of 20 claims, located southwest and south of the Nor-Norock leases (Beaver Pond and Main South Zones), were staked by *Kalrock Developments Limited* in 1980. An interpretation of an OGS airborne survey was completed that same year. Linecutting, ground magnetometer, MaxMin, and CEM surveys were completed in 1982. The EM surveys detected several strong conductors and in 1983 the company drilled 3 holes, totalling 866 ft (240 m). Minor amounts of unspecified sulphides were present within the drill holes; however, no assay results are available. By 1990 the property consisted of 36 claims and during that year *Kalrock Resources Limited* completed prospecting and AEM follow-up geophysics of selected areas using a Crone CEM instrument.

**1986 to 1988:** A group of 16 claims was optioned from *L. Cousineau* by *Kidd Creek Mines Ltd.* This property straddled the western boundary of the present Cousineau Property. Kidd Creek drilled 2 holes, totalling 202.4 m, a short distance to the east of Highway 502. The target of this drilling is thought to be molybdenite mineralization near the margins of the Rice Bay Dome. During 1987 and 1988 Mr. Cousineau excavated 11 trenches on the property.

**1993 to 1995:** A 6 claim property, located north of Moosehorn and Nickel Lakes, was staked in 1993 by *Phelps-Dodge of Canada Ltd.* Over the next 3 years the company completed linecutting, geological mapping, lithochemical sampling, ground HLEM and magnetometer surveys, and a Transient Domain EM (TEM) survey.

**1998 to Present:** The present, 23 claim, 111 unit Cousineau Property was staked between 1998 and mid-2005 by *Louis and Ray Cousineau*. During that time they completed considerable prospecting, excavated in excess of 30 trenches on several soapstone occurrences and some of the historic Cu occurrences, and have discovered several previously unknown occurrences. Assays obtained from these trenches include *16,229 ppm Cu, 437 ppb Au, and 458 ppb Pd* from Pit 52; *1936 ppb Au, 99 ppm Ag, 3543 ppm Cu, 4188 ppm Pb, 246 ppb Pd, and 129 ppb Pt* from Pit 53; and *1692 ppb Au* from the Zone 19 trench. Several large samples taken from the Grassy Portage Ultramafic Pyroclastic sequence were sent for caustic fusion analysis to test its diamond-bearing potential. No diamonds of any size were recovered. The property was optioned to *MetalCORP Ltd.* on September 2, 2005. MetalCORP has since completed linecutting, geological mapping, and detailed prospecting over the central portion of the property.

**1999, 2001:** Two blocks of claims comprising 6 claims (35 units) were staked by *J.E. Bond II, A. Eveleigh, and J.G. Clark* to cover the Beaver Pond and Main South Zones. These claims straddled the present North Rock and Cousineau property boundaries. The property was optioned to *Northern Crown Mines Ltd.* who then completed a program of prospecting (61 samples) during May and June 2001. During this time the property and the Beaver Pond Zone rock dump were also sampled by Inco Ltd., Greenshield Resources, and North American Palladium. The best assays were obtained from the rock dump and graded up to *8.9% Cu, 0.87% Ni, 690 ppb Au, 0.05% Co, 1570 ppb Pt, and 590 ppb Pd.*

**2001, 2003 to Present:** A single, 15 unit claim, that included the East Cu Zone, was staked by *A.J. Eveleigh and J.E. Bond* in mid-2001. Five additional claims (27 units) were added to the property in 2003. Two prospecting programs were completed during 2003 and 2004. The property was optioned to *MetalCORP Ltd.* during October 2004. MetalCORP added another 11 claims (77 units) to the property late in 2004 to bring the total to 17 claims (119 units). During 2005 MTC completed an AeroTEM II helicopter-borne survey, a 14 hole, 3900 m, Phase 1 diamond drill program, linecutting, detailed prospecting, and geological mapping.

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## 6.0 2006 Trenching and Mapping Program

From the beginning of May 2006 until late September of the same year, a crew has been mobilized to carry out exploration on North Rock Property east of Fort Frances. The property includes a package of contiguous claims owning to 2 distinct entity; North Rock and Cousineau. Crew members was consisting of several field technicians that were performing line cutting, prospecting and mechanical work related to trenching such as washing and cleaning the removal strips of vegetation done with an excavator machine called backhoe. The present work is focussing on the trenching although everybody was involved in those 3 domains and sharing food and lodging. The field technicians involved on trenching were Jeff Pinksen, Jonathan Pinksen, Albert Eveleigh, Shane Dyer, Sheldon Earl, Dave Pykari and Kevin Rice. Mapping of the trenches and field supervision was mandated to Mitch Dumoulin, P. Geo., that is also the author of this report (report in accordance with previous work described by Allan Mac Tavish P. Geo., Exploration Manager for Metalcorp Ltd).

The entire program ended up with 15 trenches stripped out (see figure 4), washed and cleaned with water pressure equipment such as fire holes and water pumps type WAJAX to expose the rocks and make it possible for mapping and understanding of the geology at those locations (see figures 5, 6, 7, 8). Four main locations were exposed throughout North Rock and these designated zones were; Beaver Pond, Main South Zone, East Zone and Bjorkman (see figure 4). For a period of about 5 months, a minimum of 2 field technicians were constantly following the progression of the backhoe with the cleaning, as well as cutting along painted lines drawn by the geologist to sample the main rock units typical to these trenches. Mapping consisted in describing in detail the geology and geological structures in the perspective of understanding the main structural controls of the mineralization along the best know trap of this area, and which consists in the stratigraphic contact between the gabbroic layered intrusion and the volcanic-ultramafic flows bordering the gabbro to the north. Mapping started with a quick survey with a Garmin GPS76S handheld GPS instruments and a measuring tape to draw the lines to be sampled, with all data recorded on paper from the field and which data being downloaded later in a laptop computer to be imported in MapInfo/Discover GIS from related spreadsheets.

Sampling was performed with 3 rock saws, running with a gas motor propelling a 12 or 14 inches diamond blade, to cut channel lines about 2cm wide by 5-6cm deep along the trenches following systematic painted and measured lines marked up by the geologist on specific locations of the trench and generally crossing perpendicularly the rock units. A total of 1868 samples were cut overall, bagged up on site and shipped to ALS Chemex Laboratories of Thunder Bay for preparation, and then transferred to the Vancouver Laboratory for final assay analysis of 24 elements including bases metals as well as precious metals. All 15 trenches mapping and location are plot at 1:100 scale on maps 2 to map 16 and inserted in back pockets of the report (Volume I). The channel lines and the location of the best samples are plot on the same trench's maps on a grid UTM NAD83, and the sample list is on a table form in Appendix II. All Certificates of Analysis are located in Appendix IV. This trenching program was contracted by Metalcorp Limited to Eveleigh Geological Consulting (EGC) of Thunder Bay, Ontario. Mitch Dumoulin was the Senior Geologist in charge of the program, as well as the designated qualified person.

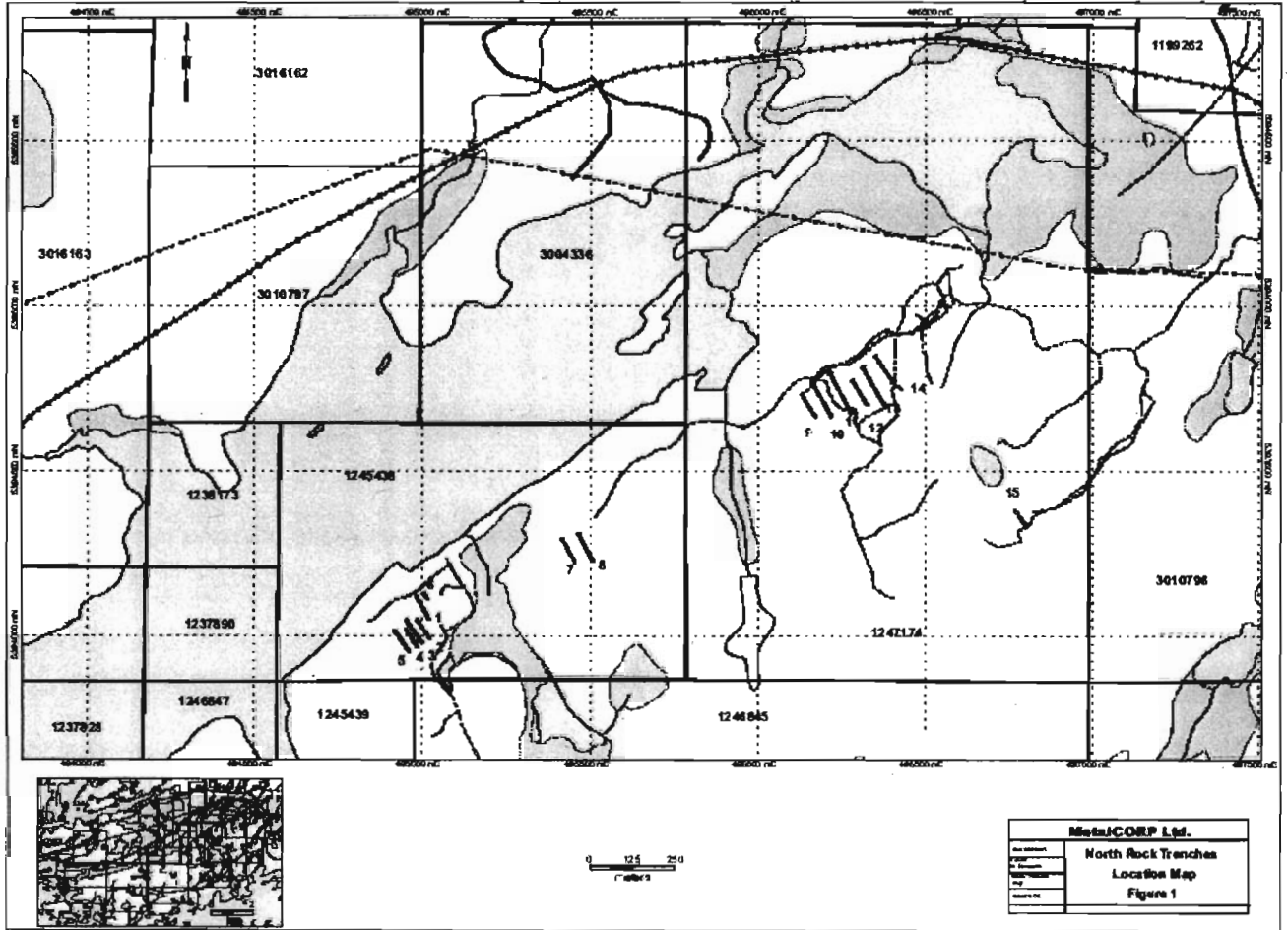


Figure 4: Location Map of the Trenches



Figure 5: Location and Geological Map of Trenches 1 to 6 at the Beaver Pond Area



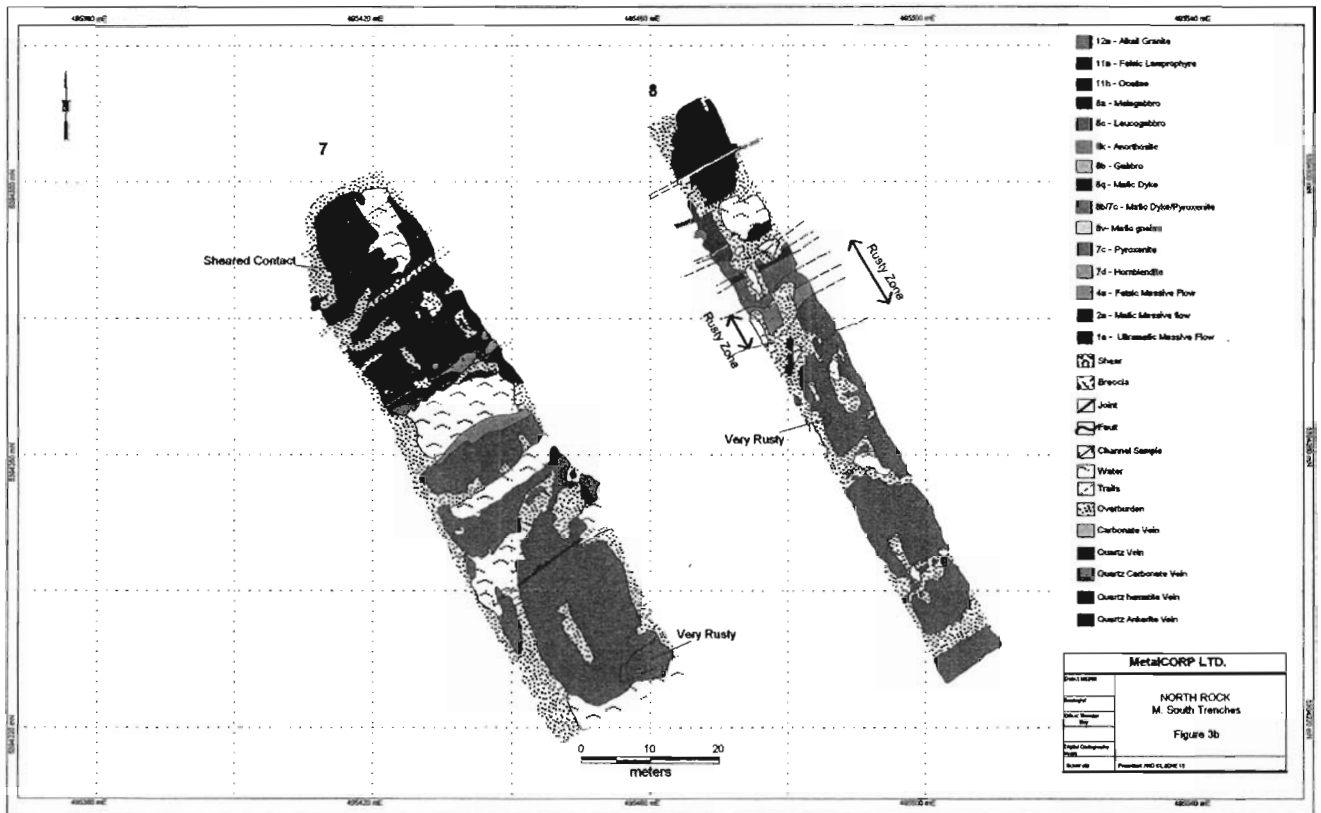


Figure 6: Location and Geological Map of Trenches 7 and 8 at Main South Zone

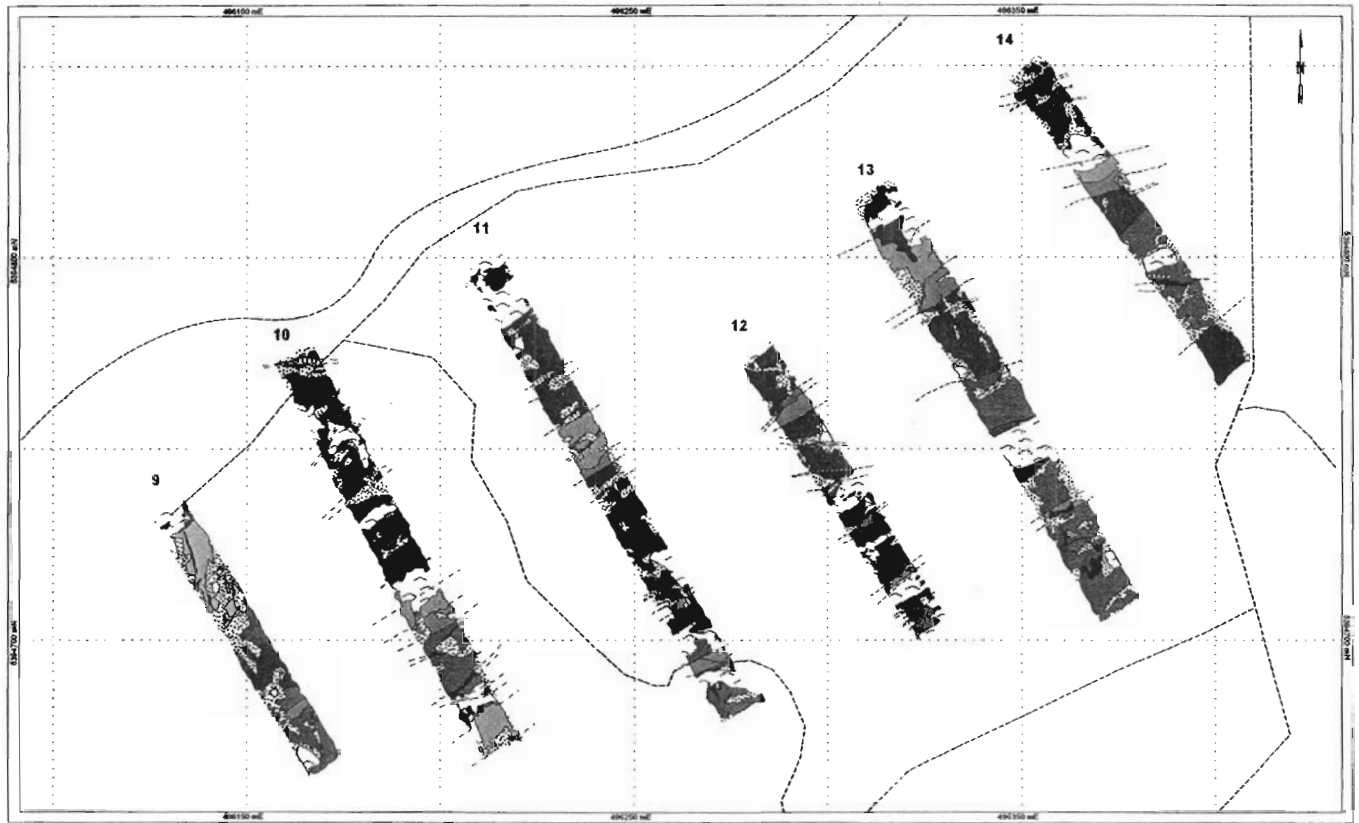


Figure 7: Location and Geological Map of Trenches 9 to 14 at East Zone

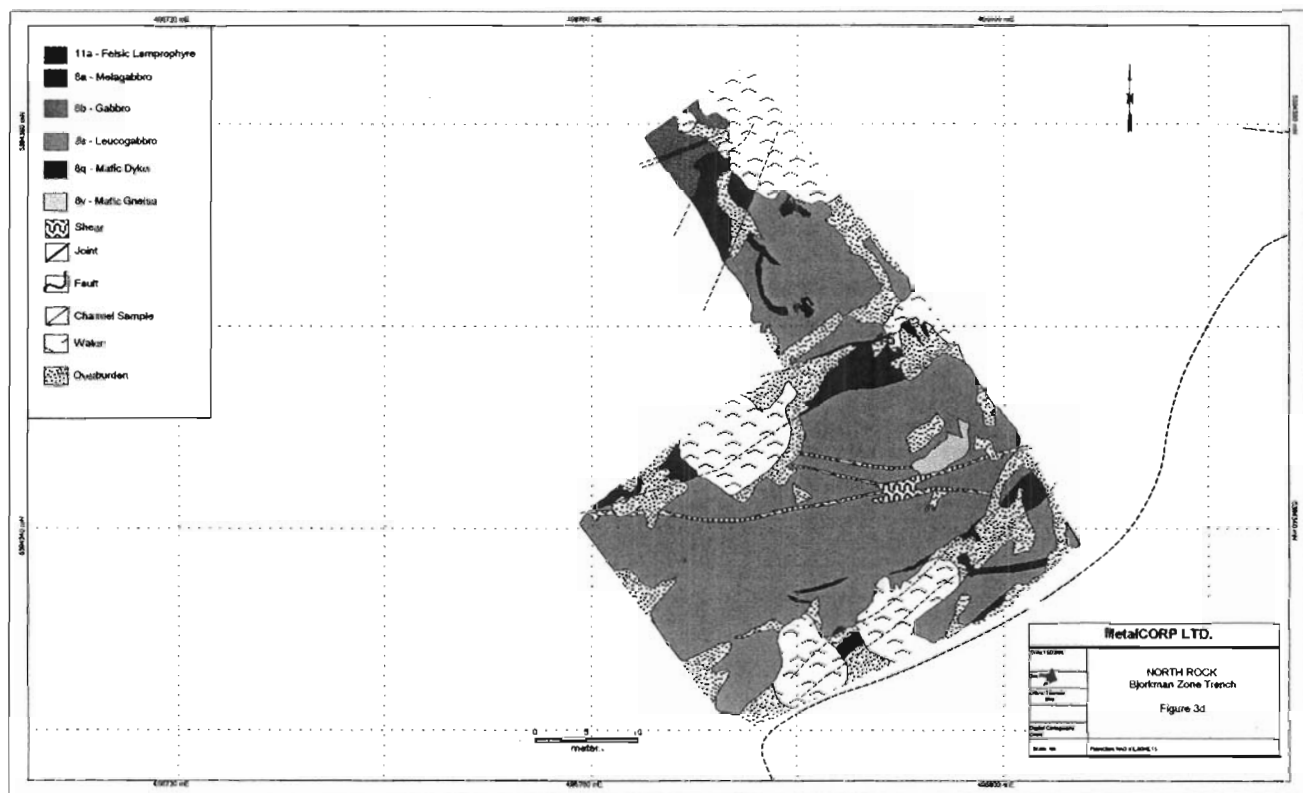


Figure 8: Location and Geological Map of Trench 15 (Bjorkman Area)

## 7.0 Property Geology

The property geology is summarized from Harris (1974) and Poulsen (2000) and modified using observations made by the author and EGC geologists and field technicians during the 2005 and 2006 field seasons.

The North Rock Property (Figure 3) is primarily underlain by the differentiated Grassy Portage Intrusion (GPI) with lesser amounts of the Grassy Portage ultramafic pyroclastic sequence (GUP); clastic metasedimentary rocks of the Couthiching Metasediments; granitoid rocks of the Bear Passage and Blind Bay plutons; sections of 2 formational, composite, chemical/clastic metasedimentary sequences; two narrow mafic metavolcanic units; and a few, possibly subvolcanic gabbro sills. All observed rock-types comprise the southern limb of a large-scale open, antiformal fold cored by the Rice Bay Dome located approximately 1.50 km north of the property (Figure 3). Most rock-types have been regionally metamorphosed to lower amphibolite-grade.

The southwestern two-thirds of the *Grassy Portage Intrusion* underlies the core of the property (~75%). This large, sill-like, mafic complex intrudes all observed supracrustal rock-types, and is composed of a well-differentiated, locally layered, cumulate sequence of medium- to coarse-grained, melagabbro, gabbro and leucogabbro; coarsely plagiophyric to glomero-plagiophyric gabbro to leucogabbro; localized intervals of medium- to coarse-grained anorthosite; and a discontinuous, non-cumulate, ophitic-textured, melagabbroic border phase that is present along both the upper and lower contacts of the complex. The intrusion is structurally overturned and stratigraphically south-facing. Chalcopyrite-dominated mineralization concentrates along both upper and lower contacts with the greatest sulphide abundances observed near the basal, or northern contact.

Narrow, discontinuous, bands of *mafic metavolcanic rocks*, up to 300 m thick, flank the northern and southern contacts of the Grassy Portage Intrusion. These rocks consist of amphibolitized, fine-grained, massive to pillowed flows, often recrystallized due to contact metamorphism, that locally exhibit narrow intervals of hyaloclastite and fine, interflow, clastic and chemical metasedimentary rocks.

The geology observed from the trenches at a more detailed scale reveals a fairly regular stratigraphy from one trench to another one. At the trench's location, excepted for trench #15 which is in the hearth of the intrusion and mainly composed of coarse grained pegmatitic leuco gabbro, all the trenches cut the northern gabbro contact from roughly 40 meters to the south up to about 40 meters north of it, and indicate regular sequences of medium grained equigranular gabbro becoming melanocratic towards the contact, this one lying on a coarse grained leucocratic and likely pegmatitic gabbro at the stratigraphic contact of the gabbro with the meta-volcanics. At the gabbro contact, a strong metasomatic band of fine grained mela-gabbro with variable widths between 0-5 meters is frequently mixed with pillowed mafic meta-volcanics material, when the latest is not directly in contact with the gabbro. Occasionally, a few dykes of Lamprophyres slightly cut the stratigraphy and can be found in any of the geological units. Mineralization is found in these 3 main units; the medium grained mela-gabbro, the coarse grained pegmatitic leuco gabbro and the metasomatic rocks on the north side of the contact within the first 20 meters northwards this contact in the fine grained mela gabbro mainly, but also in the pillowed mafic meta volcanics.

## 8.0 Mineralization

Prior to the work by MetalCorp, the rocks underlying the North Rock Property were known to host the historic Beaver Pond Cu Deposit (1,020,458 tons at 1.17% Cu), the Main South and East Cu zones, several Cu–Ni–Mo occurrences, and a Cu–Zn occurrence. The numerous base and precious metals-rich samples obtained from the known historic mineralized zones allowed MTC to better define the extent of the known surface mineralization. Most of the presently defined, surface mineralized zones are aligned roughly subparallel to the basal contact of the Grassy Portage Intrusion, are elongate in outline with diffuse margins, and contain highly variable amounts of sulphides with highly variable, but internally consistent, base and precious metals grades associated with a confined range of rock-types.

As described above, the four main area of interest were Beaver Pond Zone located ~150 m southeast of Grassy Portage Bay of Rainy Lake, Main South Zone that is located 150 m northeast of Beaver Pond Zone, East Zone which is located ~875 m to the northeast of Main South Zone and another area delimited from a high grade value of Platinum during summer 2003 from prospecting and that is located 1km south of East Zone in the hearth of layered gabbro intrusion. The 3 first zones are directly related and on strike with the contact zone between the gabbro and the volcanics, and the lithologies crossed with the trenches were more or less similar (see figures 5 to 8). The gabbro shows variable properties typical to an intrusive such as pegmatitic phases or differentiation which also causes enrichment or impoverishment of dark minerals in the matrix of the rock resulting in melanocratic or leucocratic textures.

In relation with the trenches, most of the mineralization occurs in the vicinity of the gabbro-volcanics contact. The mineralized corridor is fairly constant from the west extremity of Beaver Pond Zone to the east end of East Zone covering up to 1.5km along this contact in trenching work. A typical slice or cross-section of one of the trench from south to north would begin in a very poorly mineralized medium grained gabbro, which gabbro becomes melanocratic with an increase of sulphides (po-cpy mainly) when getting closer to the contact at an average distance of 20 meters up to 5 meters to the contact where a coarse grained leucocratic pegmatitic horizon develop with a width of 1 to 5 meters before hitting the contact. The melanocratic gabbro contains traces increasing to 8% of disseminated sulphides with local spots that can reach up to 15% mainly in pyrrhotite and chalcopyrite. The contact leuco gabbro contains less sulphides with an average of 1 to 3% disseminated or blebby sulphides, but is regularly higher grade than the melanocratic gabbro. The sulphides are normally distributed as disseminated, blebs of wisps in the matrix. On the north side of the contact, which side is considered to be the hanging wall as well as the host rock, a thin band of ultramafic rocks separate the gabbro from the meta-volcanic rocks to the north. This band is irregular, and sometimes disappears at the contact where it generally varies from 1 to 5 meters in thickness and consists in some basal mafic to ultramafic intrusive rock such as a fine grained mela-gabbro or fine to medium grained Pyroxenite. Mineralization is found irregularly in these rocks as pods or patches mostly found along the local fracturation paths, and also consist in a mix of pyrrhotite and chalcopyrite. Some relatively high values of Platinum Group minerals have been found preferentially in this horizon. Finally, passed this horizon is an environment of pillowed mafic meta volcanic rocks that occasionally contain remnant patches of mineralization also associated with 2 major fracturation patterns running roughly at 340 and 020 degrees azimuths. Several samples of malachite staining altered rocks have been taken in this rock unit.

According to the fact that these zones are close to Grassy Portage Bay in very rocky terrane and thus poorly covered by vegetation for a thin layer of overburden, a high percentage of these rocks have been more or less exposed to weathering. As soon as the rock was exposed, it resulted in a strong oxidation of the mineralized horizons along the contact in the 3 main area showing rusty domes or platforms in the gabbro, and pods or spots of rust associated with fracturation in the mafic-ultramafic rocks.

North Rock Trenching 2006: Best Results															
Trench	Channel	Main Interval (m)			Interval	Sub-intervals (m)			Cu	Ni	Ag	Au	Pt	Pd	
#	Line	From	To	Length	Type	From	To	Length	%	%	gpt	gpt	gpt	gpt	
1	E	58.00	60.00	2.0					0.18	0.16					
					Including	59.00	60.00	1.0						0.13	
2	C	42.00	49.00	7.0					0.11	0.07	0.10	0.01	0.06	0.13	
2	D	43.00	46.00	3.0					0.15	0.08	0.10	0.02	0.10	0.21	
2	F	36.45	38.45	2.0					0.44	0.07	0.65	0.09	0.19	0.54	
3	C	37.00	39.30	2.3					0.29	0.10	0.88	0.06	0.08	0.21	
3	E	35.60	55.70	20.1					0.11	0.04	0.35	0.03	0.06	0.14	
					Including	48.00	55.70	7.7	0.16					0.16	
3	G	55.50	57.50	2.0					0.18					0.17	
3	H	35.00	44.00	9.0					0.14					0.13	
4	D	37.20	39.50	2.3					0.81					0.18	
4	E	45.00	55.00	10.0					0.31	0.16	0.56	0.03	0.08	0.21	
					Including	46.00	47.00	1.0	0.52	0.77	1.00	0.02	0.09	0.42	
5	D	47.00	60.00	3.0					0.19	0.05	0.53	0.03	0.09	0.17	
5	E	48.00	51.00	3.0					0.39	0.07	1.27	0.07	0.16	0.34	
7	A	1.00	15.00	14.0					0.88	0.02	1.24	0.25	0.03	0.04	
					Including	3.00	5.00	2.0	2.01	0.03	3.05	0.20	0.01	0.01	
					Including	13.00	14.00	1.0	3.16	0.04	4.70	2.48	0.01	0.02	
7	C	33.00	34.00	1.0					1.45	0.06	1.80	0.14	0.07	0.02	
7	D	36.00	36.00	1.0					1.23	0.03	2.80	0.14	0.03	0.01	
7	E	38.00	39.00	1.0					1.13	0.03	1.6	0.27	0.03	0.01	
7	F	55.00	55.80	0.8					0.01	0.01	0.1	0.01	0.17	0.16	
8	D	38.00	41.00	3.0					2.31	0.25	5.57	0.32	0.01	0.04	
8	E	42.00	46.00	4.0					2.74	0.44	5.68	0.84	0.02	0.02	
8	F	55.00	61.30	6.3					0.83	0.22	1.27	0.13	0.02	0.01	
8	F	65.00	67.70	2.7					0.01	0.01	0.25	0.01	0.64	0.04	
					Including	65.00	66.00	1.0					1.05		
8	H	63.30	74.00	10.7					0.08	0.04	0.23	0.02	0.15	0.11	
					Including	65.00	66.00	1.0					0.52		
9	E	24.90	26.30	1.4					0.26	0.05	0.60	0.02	0.34	0.16	
10	A	0.00	2.00	2.0					0.29	0.12	5.60	0.03	0.06	0.15	
10	E	36.00	39.00	3.0					0.22	0.02	0.63	0.05	0.18	0.67	
					Including	36.00	37.00	1.0	0.52	0.01	1.40	0.12	0.28	1.54	
11	D	33.00	37.00	4.0					0.23	0.09	0.83	0.06	0.13	0.23	
11	E	53.00	56.00	3.0					0.12	0.06	0.50	0.01	0.04	0.17	
11	E	64.00	67.00	3.0					0.02	0.02	0.50	0.01	0.05	0.45	
11	K	136.90	137.60	0.7					0.47	0.03	1.50	0.08	0.01	0.54	
12	D	28.40	30.00	1.6					0.24	0.13	0.55	0.04	0.04	0.14	
12	H	71.60	72.30	0.7					0.14	0.07	0.50	0.12	0.02	0.22	
12	H	83.00	86.00	3.0					0.08	0.02	0.23	0.03	0.08	0.27	
12	J	76.80	77.20	1.6					0.10	0.03	0.35	0.03	0.20	0.38	
12	K	74.80	75.80	0.8					0.07	0.02	0.10	0.04	0.44	0.75	
13	H	87.00	93.00	6.00					0.04	0.05	0.10	0.01	0.11	0.01	
13	J	89.80	93.00	3.40					0.03	0.04	0.10	0.01	0.12	0.01	
13	J	112.00	115.00	3.00					0.30	0.04	0.57	0.06	0.16	0.32	
14	C	14.30	15.90	1.60					0.11	0.05	0.10	0.02	0.10	0.14	
14	D	17.30	18.00	0.70					0.24	0.11	0.50	0.03	0.15	0.35	
14	E	17.90	20.30	2.40					0.11	0.07	0.37	0.02	0.11	0.25	
14	H	44.00	60.40	16.40					0.07	0.07	0.12	0.01	0.07	0.13	
					Including	57.40	58.20	0.80	0.30	0.28	0.60	0.01	0.11	0.24	
					Including	58.20	59.00	0.80	0.15	0.18	0.10	0.01	0.15	0.33	
14	J	45.00	59.70	14.70					0.05	0.05	0.10	0.01	0.08	0.14	
14	M	67.50	70.60	3.10					0.20	0.03	0.47	0.04	0.24	0.33	
					Including	70.00	70.60	0.60	0.79	0.09	1.10	0.12	0.34	0.63	
14	R	86.30	87.20	0.90					0.44	0.03	2.20	0.08	0.47	0.79	
15	K	49.00	51.00	2.00					0.28	0.02	0.91	0.07	0.01	0.01	
15	L	52.00	64.00	2.00					0.11	0.01	0.30	0.03	0.01	0.01	

**Table 2: Significant Analyses from the 2006 North Rock Property Trenching Program**  
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The best results that returned from sampling come from trenches number 7 and 8 at the Main South Zone area where a thicker layer of overburden was covering the ground. This area is also more accidented. The analyses of the samples focus mainly on 6 elements such as Cu, Ni, Ag, Au, Pt and Pd. Table 2 above summarizes the most significant analyses of Trenching Program with best copper from trench #7 with 3.16% Cu over 1.0 meter and high associated silver and gold such as 4.70 gpt Ag and 2.48 gpt Au, 1.05 gpt Pt over 1.0 meter from trench #8 and 1.54 gpt of Pd over 1.0 meter in trench #10 (see Table 2). Most of the best copper, silver and gold values are related to the gabbro, while PGE's values are best found in the Ultramafic rocks (Pyroxenite-melagabbro) adjacent on the north side of the contact. Although general grades are low, these metals are spreaded out between 5 to 20 meters both sides of the contact and this pretty continuously along the known 3 zones for a strike length of nearly 2 kilometers and opened everywhere.

## 9.0 Deposit Models

The North Rock Property exhibits excellent potential to host hydrothermally modified Ni-Cu-dominant Cu-Ni-PGE massive sulphide deposits and/or PGE-dominant, low-sulphide, magmatic deposits.

Naldrett (1999) states that: '*Magmatic sulphide deposits form as the result of segregation and concentration of droplets of liquid sulphide from mafic or ultramafic magma, and the partitioning of chalcophile elements into these from the silicate melt. Sulphide saturation of magma is not enough in itself to produce an ore deposit. The appropriate physical environment is required so that the liquid sulphide mixes with enough magma to become adequately enriched in chalcophile metals, and then is concentrated in a restricted locality so that the resulting concentration is of ore grade.*' Naldrett (1989) and Naldrett et al. (1990) subdivided magmatic sulphide deposits into Ni-Cu dominant (sulphide-rich) and PGE-dominant (sulphide-poor) groups that occur within a variety of tectonic settings (*see below*).

- 1. Synvolcanic** (largely Archean): Mafic-ultramafic bodies within this class consist of distinct komatiitic and tholeiitic (*picritic and anorthositic*) classes. The komatiitic class is characteristically volcanic, is subdivided into Type 1 (komatiite peridotite-hosted) and Type 2 (komatiite dunite-hosted) deposits (Leshner 1989), and includes the Kambalda deposits (Western Australia) and several Greenstone Belt deposits, including the high-grade Dundonald, Alexo, and Langmuir deposits. The tholeiitic class consists of *picritic* and *anorthositic subclasses* which include the Pechenga (Russia) deposits and the Montcalm (Ontario) deposit, respectively. The mineralization contained within the Grassy Portage Intrusion may fit into the anorthositic subclass of the tholeiitic class.
- 2. Rifted Plate Margins:** Bodies associated with rifted plate margins occur within 2 sub-classes: those associated with *continental crust* and those associated with *ophiolites*. Members of the continental crust association include the Fox River Sill of the Circum-Superior Rift Zone, the Thompson and Raglan Ni camps of the Circum-Ungava Belt, and the Penikat Intrusion of the Kemi-Koilismaa Belt. Ophiolites are not noted for their magmatic sulphide mineralization; however, one possible example is the Acoje Ni deposit in the Zimbales ophiolite, Philippines.
- 3. Cratonic Areas:** Cratons can host *flood-basalt*-related intrusions, which include Noril'sk-Talnakh (Siberia), the Duluth Complex (Minnesota), and the Crystal Lake Gabbro (Ontario), or *large stratiform complexes* such as the Bushveld Complex (South Africa), the Stillwater Complex (Montana), the Lac des Iles Complex (Ontario), and the Great Dyke (Zimbabwe); and
- 4. Orogenic:** Mafic-ultramafic bodies within this tectonic setting can be sub-divided into *synorogenic* and *late orogenic* subdivisions. The synorogenic variety includes the Moxie and Katahdin Intrusions (Maine) and the late orogenic variety includes the Alaskan-type intrusions of Alaska, British Columbia, and the Ural Mountains in Russia.



***Ni-Cu-dominant magmatic sulphide deposits*** comprise large, rich concentrations of coarsely disseminated, net-textured, semi-massive to massive Ni-Cu sulphides that generally occur near or below the base of their host intrusions. These large, rich sulphide concentrations are not thought to be a normal consequence of magma emplacement, cooling, and crystallization. They appear to form as a consequence of a variety of types of crustal contamination, including the assimilation of crustal sulphur. These magmas require an external source of crustal sulphur before they can produce a massive sulphide deposit. Good examples of this group are the Noril'sk-Talnakh, Voiseys Bay, Eagle, Sudbury, Duluth Complex, and Kambalda deposits, all of which have identifiable sources of crustal sulphur. The Noril'sk-Talnakh, Voiseys Bay, and Eagle deposits are also examples of conduit-related deposits, which tend to be richer in metals than many other examples of this group.

***PGE-dominant magmatic sulphide deposits*** comprise low concentrations of disseminated, PGE-rich, Cu-Ni sulphides (generally <3% total sulphides) and primarily occur as stratabound and non-stratabound types. The stratabound, or *reef*-type is always associated with layered intrusions and is usually, but not always, associated with a mineralized rock layer exhibiting distinctive mineralogy or texture. The Merensky Reef of the Bushveld Complex and the J-M Reef of the Stillwater Complex are prime examples of reefs associated with distinctive rock units. The Main and Lower Sulphide zones of the Great Dyke, Zimbabwe, are reefs not associated with a specific mineralized rock layer and occur as discreet zones within a much more extensive bronzitite unit. Some deposits, such as the Lac des Iles and Marathon deposits, are discordant in nature and do not appear to be associated with any specific horizon, rock-type, or layering. An external crustal sulphur source is not required to produce these deposits.

Deposits of both groups are mafic magma-associated and require the following conditions to form economic concentrations (Naldrett and Scott 1992, Naldrett 1999):

1. Saturation and segregation of an immiscible sulphide liquid from the silicate melt;
2. Reaction of the sulphide liquid with a large volume of magma in order to concentrate the Cu, Ni, and PGE's; and
3. Settling and concentration of the Cu-Ni-PGE-enriched, immiscible sulphide liquid into a restricted volume, in large enough concentrations to form an economic deposit. Ni-Cu-dominant deposits generally form nearly massive deposits that concentrate within or near the basal regions of an intrusion (Duluth Complex) or magma conduit (Noril'sk-Talnakh, Voiseys Bay, Eagle). Ni-dominant deposits of the Kambalda-type tend to form massive to net-textured deposits near or just below the base of thick, channelized komatiitic flows. PGE dominant deposits generally form relatively low-sulphide, disseminated deposits that often concentrate near or within a particular stratigraphic horizon of an intrusion (Merensky Reef, Bushveld Complex; J-M Reef, Stillwater Complex; Main Sulphide Zone, Great Dyke).

The formation of a PGE-dominant deposit does not generally require the addition of external sulphur to the magma; however, the addition of considerable amounts of crustal sulphur is essential to the formation of Ni-Cu-dominant deposits.

The sequence described above is not part of the normal fractionation history of mafic magmas and the formation of a deposit requires some sort of trigger to initiate sulphide saturation after ascent of magma through the crust. This trigger could constitute assimilation of crustal sulphides or silicates within the feeder system or the magma chamber; depressurization of the magma chamber, which lowers the solubility of sulphur within the magma; turbulent addition of primitive magma into a fractionating, more siliceous magma chamber which leads to turbulent convection, magma mixing, and sulphur saturation; or any combination of the three.

The complicating factor present within the North Rock area is that the observed mineralization has been affected/modified by 1 or more episodes of hydrothermal activity that resulted in considerable remobilisation, particularly of Cu and the PGE's, from an original massive deposit or deposits whose location is presently unknown/undiscovered.

## **10.0 Costs of Trenching Program**

Details of the costs in relation with the Trenching Program are detailed in Appendix III. Several field technicians such as Jeff Pinksen, Jonathan Pinksen, Albert Eveleigh, Shane Dyer, Sheldon Earl, Dave Pykari and Kevin Rice, were contracted by Eveleigh Geological Consulting of Thunder Bay to perform this program. Mapping of the trenches and field supervision was carried out by Mitch Dumoulin from the same office. Details of the contracting charges can be consulted in the Appendix, and a total of \$244,760 has been accumulated from global wages between May the third and September 21<sup>st</sup>. A total of 1855 samples have been cut from the trenches and \$94,247.64 resulted from assaying 24 metals and elements ICP for each samples. Summer 2006 exploration consisted other than trenching of a line cutting program and some prospecting, with all the workforce sharing food, lodging and gas. Because of the complexity of controlling these types of costs, a simple split has been operated to reflect these type of costs resulting in some \$13,644.14 for food and gas, some \$8,691.99 for house-warehouse-phone bills-utilities associated with the house and warehouse that we are renting in Fort Frances during that period, as well as \$3,827.94 in motel to compensate for a well too crowded house at the peak period, some \$17,060.19 for truck renting to access the property for work and finally, the charges related to the excavator (backhoe) contracted from Tom Veert Contracting of Fort Frances for \$42,760.02 after digging the 15 trenches. A grand total of \$424,991.92 has then been spent after completion of the program. All costs are available for review or due diligence in Metalcorp Limited's books at the Thunder Bay office at 309 Court Street South in Thunder Bay, Ontario (see Appendix III: Costs of Trenching Program).

## **11.0 Conclusions**

Trenching – Stripping of these 4 strategic area such as Beaver Pond – trenches 1-6, Main South Zone-trenches 7 & 8, East Zone-trenches 9-14 and Bjorkman PGE's outcrop-trench 15, brought up a high perspective on the geology of this part of the Grassy Portage's Layered Gabbro Intrusive and has been qualified as amazing geological work by fellow companies, government geologists and doctorate geologists invited on site for a scrutinized study of the trenches in relation with the regional geology. This means a stronger understanding of the mechanism related to the mineralization put in place during the different geological episodes, and permitting a more thorough approach for further exploration in the future.

## **12.0 Recommendations**

North Rock Property went through 2 phases of drilling before Trenching. A total of 35 holes have been drilled over the 3 main zones, Beaver Pond, Main South Zone and East Zone. Learning from Trenching Program suggest to perform more drilling over these area, as well as testing new area by applying new concepts and understanding of the geology and mineralization to maximise any possibilities to cross properly the potential mineralized zones. The drill rig should be used in part for definition drilling, but also for prospecting and enhance new targets such as;

1. In-filling drilling at East Zone limited on the mineralized corridor at proper azimuth
2. In-filling drilling at Beaver Pond limited on the mineralized corridor at proper azimuth
3. In-filling drilling at Main South Zone limited on the mineralized corridor at proper azimuth
4. Semi-grass root drilling at Mironski Zone West Extension for testing the upper contact of the intrusive on the south rim of the layered intrusive.
5. Grass root drilling at the High Way Zone on east side of Highway 11
6. Grass root drilling across west extension of Gabbro Contact Zone west of Beaver Pond at a kilometre scale and test it at depth under the lake to verify any repetitions of the mineralization.

### 13.0 Certificate of Qualification

I, **Michel Dumoulin**, of 507 McMaster St., Thunder Bay, Ontario, do hereby certify that:

1. I hold a *Bachelor of Science Degree in Geology (1981)* from Universite du Quebec a Chicoutimi, Chicoutimi, Quebec;
2. I am a member of the Association of Professional Geoscientists of Ontario (P.Geo. Registration #0304).
3. I have practiced my profession in Ontario and Quebec since 1981 and have been employed directly by several large mining and exploration companies and the Ministère de l'Énergie et des Ressources de Quebec;
4. I am presently an employee for Eveleigh Geological Consulting based in Thunder Bay, Ontario and am contracted to MetalCorp Ltd. as Senior Geologist and Project Manager for the company;
5. I have supervised numerous projects similar to that represented by the North Rock Project, am a 'Qualified Person' in the context of National Instrument 43-101, and have been contracted as such by MetalCorp Ltd. I consider this report to be accurate in all respects;
6. Permission is granted to MetalCorp Ltd. to use this report in a prospectus or other financial offering;

Dated December 8, 2006 at Thunder Bay, Ontario.



Michel Dumoulin, B.Sc., P.Geo.