# M. CARON

# NORTHEAST TISDALE PROPERTY

IN

# TISDALE TOWNSHIP PORCUPINE MINING DIVISION DISTRICT OF COCHRANE ONTARIO

by

2.25758

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May 27, 2003



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# 1.0 INTRODUCTION

M. Caron holds a total of 4 unpatented mining claims as single units in the northeast corner of Tisdale Township, Porcupine Mining Division, District of Cochrane, Ontario.

The purpose of the program was to locate and map the lithological units, possibly explain the sources of the electromagnetic anomalies and to locate the possible extension of the gold bearing carbonate horizon from the former Beaumont Mine located in the southeast corner of the north half of Lot 3, Concession 6.

# 1.1 LOCATION AND ACCESS

The property is located in the north half of Lot 1, Concession 6, Tisdale Township. Access to the property is via Highway 101 in South Porcupine, north on Florence Street and the all weather gravel Bell Creek mine road for 2.3 km. The north Timmins back road or the Beaumont Mine road traverses part of Whitney Township and across Tisdale Township to Highway 655 (TG Highway). The gravel road is seasonal and is in need of repair due to potholes and washouts from beaver dams.

Approximately 2.5 km along the Beaumont mine road intersects the Timmins Forest Product road which trends north-northwest and north along the Whitney - Tisdale township boundary line. This road is a winter haulage road and access is by foot or 4 wheel all-terrain vehicle for approximately 1.6 km to the junction of the north-south and east-west Tisdale Township lines and the northeast corner of the property.

Figure 1 illustrates the location and access roads in Whitney and Tisdale Township and the M. Caron claim groups. Tisdale Township is located in NTS 42B/01 and Latitude 48° 27' N to 48° 32' N and Longitude 81° 12' W to 81° 20' W. The project area is located between UTM co-ordinates 484,052E to 484,869E and 5,376,083N to 5,375,266N in Zone 17.

# 1.2 TOPOGRAPHY AND VEGETATION

The low-lying areas are covered with tag alders and black spruce with minor amounts of balsam and spotted locations of tamarack along the edges. Due the absence of the beavers and the decay of the dam structures, the former beaver pond had largely reverted to open glass lands with small isolated shallow ponds fringed with tag alders and dwarf black spruce. To the east of the pond the vegetation is mixed alder, black spruce and dense cedar.

The boundary areas around the various swamps are generally low, relatively flat silty sandy clay till and reworked till with a mixture of black and white spruce, minor birch, poplar and balsam The higher topographic areas are dominated by white

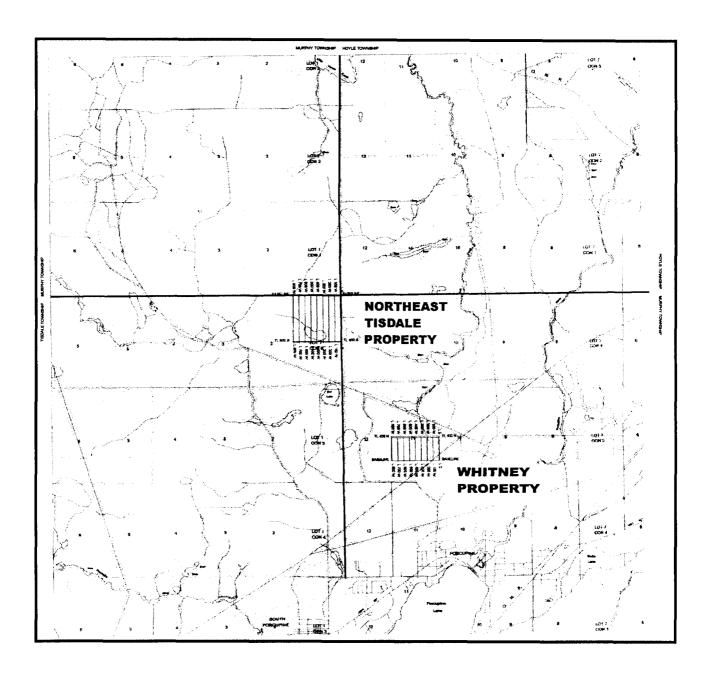


Figure 1: Location and Access Map of the M. Caron Northeast Tisdale Property and Whitney Property, Tisdale and Whitney Townships, Porcupine Mining Division, District of Cochrane, Ontario.

spruce and poplar with minor and varying amounts birch and black spruce.

# 1.3 PROPERTY STATUS

The Northeast Tisdale property is owned 100% by M. Caron. The property consists of 4 contiguous unpatented mining claim as single units and as illustrated in Figure 2 and summarized in Table 1. The property is in good standing order and all mining claims are deemed active.

Table 1: Current Active Mining Claims of M. Caron, TisdaleTownship, Porcupine Mining Division, District of Cochrane, Ontario

Mining Claim	Recording Date	Location in Tisdale Tw			
P 1227968	1998-JUN-03	SE 1/4 N ½ Lot1 Con 6			
P 1227969	1998-JUN-03	SW 1/4 N ½ Lot1 Con 6			
P 1227970	1998-JUN-03	NW 1/4 N ½ Lot1 Con 6			
P 1227971	1998-JUN-03	NE 1/4 N ½ Lot1 Con 6			

# 1.4 PREVIOUS EXPLORATION ACTIVITIES

Geological mapping and studies have been conducted by various authors of the Ontario Bureau of Mines, Ontario Department of Mines, Ontario Geological Survey and the Geological Survey of Canada, notably Burrows (1924), Hurst (1939), Ferguson (1968), Pyke (1982), Pirashco and Kettle (1991) and Pressacco (1999). Several thesis have been completed on the various aspects of the geology and gold mineralization of Tisdale Township and the Porcupine Gold camp.

The earliest recorded holder of the current property was Godeau Porcupine Mines Limited during 1920. There are no records of any work preformed by them.

During 1990, Asarco Exploration Company of Canada Limited completed line cutting, total field magnetic and an electromagnetic (EM16) surveys. They identified a structural trend bearing N300° E and electromagnetic anomalies from 2+50mS to 2+60mS on Lines 1+00W, 1+75W and 2+75W, at 1+00mS on Line 2+00E trending for approximately 300 metres and an anomaly trending N70° E cross cutting the magnetic trend from 0+75mS on Line 2+75mW to 0+55mN on Line 0+00. Their mining claims were represented by claim numbers 1115124, 1115130, 1115136 and 1115139.

Asarco followed up their geophysical surveys with 4 diamond drill holes totalling 696 metres. Only one drill casing was located during the current geological mapping program and is indicated on the enclosed map the remaining holes are located by the

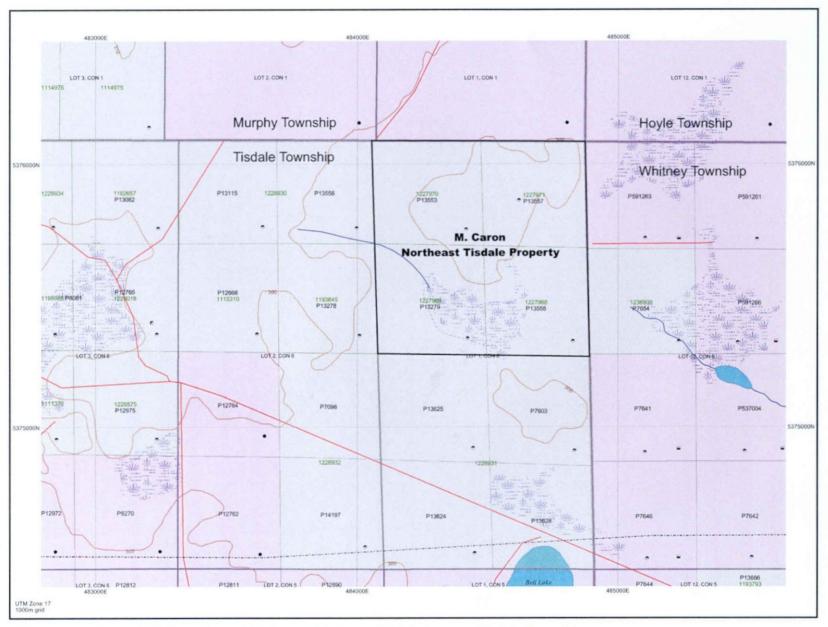


Figure 2: Location and Mining Claims of M. Caron's Northeast Tisdale Property, Tisdale Township, Porcupine Mining Division, District of Cochrane, Ontario.

drill sites.

M. Caron complete 8.8 km of line cutting, total field magnetic survey and a VLF-EM surveys during September, 1999. The baseline was established on the north Tisdale Township line with Line 0+00mE on the north-south Tisdale Township line. The grid lines were cut at 100 metre intervals with pickets every 25 metres.

The mining claims around the current property has had a variety of exploration activities, namely:

Total Energold Corp. whose property was located adjacent to the west (claim 1155071) and south (claims 1111380 and 1111389). In 1991, they completed a magnetic, VLF-EM and HLEM geophysical surveys on 100 metre spacing grid lines with their Line 8+00W located at or near the current west boundary and their Tie Line 8+00N located near the southern boundary of the property.

During 1996, Moneta Porcupine Mines Limited completed line cutting and a magnetic and VLF-EM surveys adjacent to the current southwest mining claim. Their mining claims were 1115226 and 1115227.

During the mid 1980's, Davidson Tisdale Mines owned the current property with their Broulan Project. Several references indicated that the property was surveyed and geologically map, however this work was not filed as assessment work.

# 2.0 GEOLOGY & MINERALOGY

# 2.1 REGIONAL GEOLOGY

The Porcupine Gold Camp is located in the Early Precambrian (Archean) Abitibi Greenstone Belt. This easterly trending tectonic belt, 475 by 125 miles in area, is the largest continuous Archean greenstone belt in the Canadian Shield. Located in the southwestern part of the Superior Tectonic Province, the Abitibi belt is truncated east and west by the Greenville Front and the Kapuskasing Structure, respectively.

The following is a short summary of the geology of the Porcupine Gold Camp which has been described by many authors, such as Dunbar (1948), Hogg (1950), Carlson (1967), Ferguson (1968), Leahy (1971), Pyke and Jensen (1976), Pyke (1975, 1980, 1982), Colvine, Fyon, Heather, Marmont, Smith and Troop (1988).

"The lithological units as exposed in the Timmins area are divided into 2 sequences, the Deloro and Tisdale Groups (thought to be separated by the Destor-Porcupine Fault). The older sequence of volcanic rocks approximately 4500 to 5000 metres thick, the Deloro Group (Dunbar, 1948) consists of basal komatilitic flows (Formation I) which are overlain by calc-alkalic basalts and andesite (Formation II) and

felsic pyroclastic rocks (Formation III). Interbedded within the felsic volcanic rocks, near the top of the Deloro Group, are oxide and sulphide facies iron formations (Pyke, 1975, 1980a,b, 1982).

A major change from calc-alkalic to komatiitic volcanism marks the beginning of the Tisdale Group which is approximately 4000 metres thick. The lowest formation (Formation IV) consists of ultramafic to basaltic komatiitic to magnesium tholeiitic basalt flows which are overlain by iron tholeiitic basalts (Formation V). The uppermost volcanic sequence (Formation VI) consists of felsic, calc-alkalic pyroclastic rocks (Pyke, 1975, 1980a,b, 1982).

Metasedimentary rocks of the Porcupine Group has an approximate thickness of 3000 metres. This Group consists of interlayed greywacke, siltstone and lesser conglomerate, form part of a turbidite sequence which may be time equivalent to the upper part of the Deloro Group and the entire Tisdale Group (Pyke, 1980a,b, 1982).

Large sill-like medium to coarse grained bodies of dunite and Iherzolite were intruded almost entirely within the Deloro Group. Minor epizonal quartz feldspar porphyry were intruded into the metavolcanics. Northeast trending dykes of Middle and Late Precambrian age (Pyke, 1973) while the north trending diabase dykes are probably of Early Precambrian age. A major structural break, the Destor-Porcupine Fault trends northeasterly across the Porcupine Gold Camp (Pyke, 1982).

North of the DPFZ, two periods of folding can be discerned; an original north trending series of folds were subsequently refolded about an east-northeast axis. The main axis of the second period of deformation is delineated by the Porcupine Syncline which in the northeastern part is coincident with the Destor-Porcupine Fault (Pyke, 1982)."

Two major faults, the Destor-Porcupine and Larder Lake faults form prominent structural discontinuities in the rocks of the Timmins-Kirkland Lake area. These two easterly trending faults are cut and offset to the west by many northerly trending faults such as the Benedict-Burrows and Montreal faults. According to Pyke (1982), the Destor-Porcupine represents a fundamental fracture in the Early Precambrian crust and is part of a major east-west fracture zone extending a distance of 440 km from the Kapuskasing Structure to the Grenville Front where it merges with the Cadillac break.

Within the Timmins gold camp the Destor-Porcupine shear zones are at least 150 meters wide, steeply dipping north to vertical and associated with ultramafic volcanism and sedimentation. According to Pyke (1982), the abundance of ultramafic volcanic rocks along and in proximity to the Destor-Porcupine fault suggests that the fault provided a fissure up which ultramafic magma moved up from a source zone in the mantle.

Most of the volcanic rocks in this region typically show a greenschist grade of regional metamorphism. However, in some places a higher grade amphibolite facies is found in recrystallized volcanic rocks at the boundaries of granite batholiths (Jolly, 1978). Prehnite-pumpellyite facies occurs in the volcanic rocks as patchy zones mostly in breccias, amygdaloidal parts of flows, and along fractures. This lower grade metmorphism is thought to be the result of alteration of the rocks as they come in contact with Archean sea water. It has been suggested that considerable introduction of sodium oxide (albitization) resulted from this contact.

A regional view of gold deposits of the Timmins area from many writers (eg, Pyke, Jensen, Fyon and Crockett...) Has resulted in the synthesis of a model for gold mineralization. The common features and characteristics of these deposits in a regional geological context include the following:

- (a) Most gold deposits seem to be fault controlled. They are either within or in close proximity to east trending faults such as the Hollinger, Porcupine-Destor or larder Lake faults.
- (b) Most gold mineralization is spatially associated to the unconformity between the ultramafic volcanics and the overlying sediments.
- (c) Rock alteration seems to an important control in gold concentration. Carbonitization, silicification and pyritization are among the most prominent alteration types.
- (d) Gold mineralization is also spatially associated to felsic intrusives. These stocks and batholiths of quartz feldspar porphyries and syenite are believed to provide a favorable structural environment or actually to be the source of the hydrothermal gold-rich solutions.
- (e) Emplacement of gold within the shear zones is locally controlled by the relative ductility of the lithology. Where rocks are ductile, there is virtually no porosity and therefore no gold. On the other hand, horizons of brittle rock have a higher porosity and provide sufficient room for gold mineralization.

# 2.2 TERRAIN GEOLOGY

Northern Ontario was glaciated by continental ice sheets at least four times during the Pleistocene. The last glaciation, the Laurentide of Wisconsinan age, is preserved in the area. By late Wisconsinan time ice receded northeast through the area and deposited a variety of surficial materials including extensive ground morainal till. The area was probably ice free about 9,000 years ago. Glaciolacustrine sediments were deposited over the till. Recent organic terrain developed in poorly drained depressions. These glacial and non-glacial deposits, form a discontinuous mantle over the bedrock.

The rolling terrain is characterized by numerous rock knobs. Glaciofluvial deposits of sand and gravel, including occasional kame and esker formations occur a short distance from the claim group. Planar terrain, reflecting the deposits of

glaciolacustrine silts and clays, are found in the lowlands.

Local areas of moderate relief and glasciofluvial landforms are generally well drained, even where bedrock occurs close to ground surface. In contrast, poorly drained topographical lows are frequently occupied by wet organic wetland deposits.

# 3.0 CURRENT EXPLORATION ACTIVITIES

The author conducted the geological mapping of the Northeast Tisdale property on May 8, 9 and 16 with drafting on May 10, 12 and 27 and report writing on May 27 and 28, 2003.

During research and the geological mapping of the property, several shafts were indicated. Only 1 of the 2 indicated shafts were located that being approximately 30 metres east of 1+75 m South on Line 5+00m East which is approximately 3 metres by 3 metres. The other shaft indicated in publications is suspected to have been filled in during the overburden stripping in the area between Line 1+00 West and 2+00 West at 4+00 South. A third 2 metre by 2 metre timbered shaft was located during mapping which is located 7 metres east of 3+75m South on Line 3+00 West.

Only one drill casing was located from the Asarco diamond drilling program which is located at 3+76m South on Line 3+00 West. The azimuth of the drill casing is N195° E. The drill log filed for assessment work indicated that the azimuth for this hole was N180° E.

Two large areas were stripped of overburden and channelled sampled. The company which completed this work is unknown by the author and the work has not been filed for assessment work. These areas are located between Line 1+00 West and 2+00 West from 3+75m to 4+25m South and between Line 31+00 West and 2400 West from 3+75m to 4+35m South.

Numerous areas of the current property has been explored by trenches and shallow pits. These are suspected to have been completed during the early history of the Porcupine Gold camp. No record of these activities have been located by the author.

# **3.1 PROPERTY GEOLOGY**

Figure 3 represents the results of the geological survey for the Northeast Tisdale property and is located in the back map folder. The author has indicated the axis of the VLF-EM anomalies and the total field magnetic contour lines (57,000, 58,000, 59,000 and 60,000 nt).

The Northeast Tisdale property lies on the south limb of the isoclinal North

Tisdale anticline. The anticlinal axis is at or near the northern Tisdale Township boundary.

The basaltic komatiites in massive and pillow flows are located in three distinct areas of the property. Namely, the northeast and northwest corners and are massive flows, fine to fine-medium grained, dark green to black green on fresh surfaces and weathers light gray to light orange-brownish gray. These flows exhibit poor to weak development of schistosity. The third location is located southwest of the central shaft location and is coincident with the magnetic high. This area was exposed from a bedrock - overburden stripping program from past owners. The outcrops consists predominately of pillow flows approximately 25 to 40 cm in size, with good to excellent bun shaped pillow. Top determinations are to the south southeast and steeply dipping to the south. The northern portion of the cleared area consists of massive basaltic komatiites with moderate to strong development of schistosity which may be due to a suspected east northeast trending fault zone.

The iron tholeiitic metavolcanics are medium to dark green to black with weathered surfaces of medium dark gray to dark green. The dark green to black variety of the iron tholeiite are magnetic.

The tholeitic metavolcanics are subdivided into two main groups: magnesium rich and iron rich. The magnesium tholeitic metavolcanics are light gray to light green and the weather surface is usually medium gray to greenish gray. Massive flows are generally fine grained but can be fine to medium grained near the basal portion of the flow. Pillow flows are common and some appear to be composed entirely of pillows while others are pillow breccia to isolated and/or broken pillows set in a tuffaceous pyroclastic matrix. Only a few locations on the property has a distinct pillow flow unit while the majority are either pillow breccia or pillow fragments within a tuffaceous pyroclastic flow unit.

Only one area exhibits carbonatization which is located between Line 2+00 West and 3+00 West at 4+00 South. It appears that this outcrop area is divided into an east and west portion separated by a northerly trending fault.

The western portion has well formed small pillow flow overlain by an unaltered massive flow which host a few flat quartz veinlets.

The eastern portion from north to south consists of a massive unaltered thoeliite flows with shallow to flat northwest dipping quartz tourmaline veinlets and veins overlain by weakly to moderately sheared tuffaceous pyroclastic flow unit which is inturn overlain by a carbonated pyroclastic flow containing brecciated portions of pillows. These flows are overlain by a carbonated breccia followed by carbonated massive tholeitic flow. These later two units also contain very fine to finely disseminated pyrite and north northeast trending quartz stringers.

The above outcrop also contains glacial striae which trends N 45° E. A shaft was indicated to exist in the vicinity of the carbonated outcrop. The author did not locate this shaft and suspects that it may have been filled in during the overburden stripping operations.

The central shaft which is located on Line 4+00 West at 3+50 South appears to have been sunk on a narrow quartz vein hosted in a chloritic and possible sheared tholeiite. This vein appears to be related to the two parallel veins further to the northeast at or near the contact of a massive flow and a tuffaceous pyroclastic flow. The very northern portion of the outcrop exhibits small elongated pillows while along strike it grades into a pyroclastic tuff which exhibits shearing on the southeast side trending N 50° E and dips 80° southeast. To the southwest of the shaft and near the northeast end of the basaltic komatiite a carbonated sheared tholeiite exhibits shearing at N 75° E and dips 80° south.

The central portion of the property contains several sequences of massive, tuffaceous pyroclastic and pillow breccia pyroclastic flows. Several overcrops have very steep cliffs, usually on the northwest side of the outcrops, and are suspected to have been caused by northeast trending faults or shear zones. The flow units appear to trend in a northeast direction than the former published geological maps indicating an east-west stike direction.

# 4.0 CONCLUSIONS AND RECOMMENDATIONS

The Northeast Tisdale property lies on the south limb of the North Tisdale anticline and contains a sequence of massive to pyroclastic flows overlain by narrow pillow flows. The very northern units appear to trend east-west while south of the northern komatiitic flow, the tholeitic flows appears to strike in a northeasterly direction of several sequences of massive, tuffaceous pyroclastics and pillows.

A large stripped area southeast of the central shaft exhibits moderately carbonitization and pyritization.

The veining on the property is usually quartz in composition while in the stripped area they are quartz tourmaline veinlets.

Based upon the results of the mapping program, it is recommended that the grid be surveyed by either HLEM or a pole-dipole IP survey. The grid requires additional picketing and tagging. The carbonated area southeast of the central shaft and that of the central shaft should be sampled.

Upon the completion of the above recommendations and the assay results a limited diamond drilling program may be warranted.

Respectfully submitted,

Dated at Timmins, Ontario May 27, 2003

Kian A. Jensen, B.Sc., P.Geo. Consulting Geologist/Geophysicist

# STATEMENT OF QUALIFICATIONS

- I, Kian A. Jensen, of the City of Timmins, Ontario, do hereby certify that:
- 1. I am currently contracted as a consultant by M. Caron.
- 2. I am a graduate of the University of Waterloo with an Honours B.Sc. In Earth Science, Geology Major (1975).
- 3. I am a member in good standing in the following associations:
  - a) Geological Association of Canada Fellow, 1983
  - b) Association of Geoscientists of Ontario
  - c) Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) as a Professional Geoscientist Member 11004 (1999).
  - d) Association of Professional Geoscientist of Ontario (APGO) Member 0558
- 4. I have been employed as a geologist/geophysicist by various exploration, mining and consulting companies since 1978 and in the Timmins area since 1981.
- 5. I am directly responsible for the work outlined in this report.
- 6. I have no direct interest, nor do I have any shares of any company exploring the properties described in this report, nor on any adjacent or surrounding property.

Dated this 27th day of May, 2003, at Timmins, Ontario

Kian A. Jensen, B.Sc., P.Geo.

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KIAN A. JENSEN

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# M. CARON

# WHITNEY PROPERTY

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IN

# WHITNEY TOWNSHIP PORCUPINE MINING DIVISION DISTRICT OF COCHRANE ONTARIO

by

Kian A. Jensen, B.Sc., P.Geo. Consulting Geologist/Geophysicist

June 1, 2003



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TABLE 1: CURRENT ACTIVE MINING CLAIMS OF M. CARON, TISDALE TOWNSHIP, PORCUPINE MINING DIVISION, DISTRICT OF COCHRANE, ONTARIO	4

# 1.0 INTRODUCTION

M. Caron holds a total of 2 unpatented mining claims as single units in the west central portion of Whitney Township, Porcupine Mining Division, District of Cochrane, Ontario.

The purpose of the program was to locate and map the lithological units, possibly explain the sources of the electromagnetic anomalies and to locate possible parallel zones similar to the Banner Mine located approximately 250 metres south of the property.

# 1.1 LOCATION AND ACCESS

The property is located in the north half of the south half of Lot 11, Concession 5, Whitney Township. Access to the property is via Highway 101 in South Porcupine, north on Florence Street and the all weather gravel Bell Creek mine road for 0.5 km to the powerline. Additional access is via foot or all terrain vehicle along the powerline to the eastern property boundary. The gravel road is seasonal and is in need of repair due to potholes and washouts from beaver dams.

Figure 1 illustrates the location and access roads in Whitney and Tisdale Township and the M. Caron claim groups. Whitney Township is located in NTS 42B/01 and Latitude 48° 27' N to 48° 32' N and Longitude 81° 04' W to 81° 12' W. The project area is located between UTM co-ordinates 485,720E to 486,525E and 5,373,260N to 5,373,660N in Zone 17.

# 1.2 TOPOGRAPHY AND VEGETATION

The low-lying areas are covered with tag alders and black spruce with minor amounts of balsam and birch. The wet areas are covered by low lying cedar, cedar trees and dwarf black spruce, especially in the northeast corner of the property which contains a creek draining northwards.

The souther higher topographic area with bedrock outcrops are dominated by white spruce, birch and balsam, while the northern higher topographic area is covered by poplar, balsam with minor spruce and fringed with dwarf black spruce and cedar.

# 1.3 PROPERTY STATUS

The Northeast Tisdale property is owned 100% by M. Caron. The property consists of 2 contiguous unpatented mining claim as single units and as illustrated in Figure 2 and summarized in Table 1. The property is in good standing order and all mining claims are deemed active.

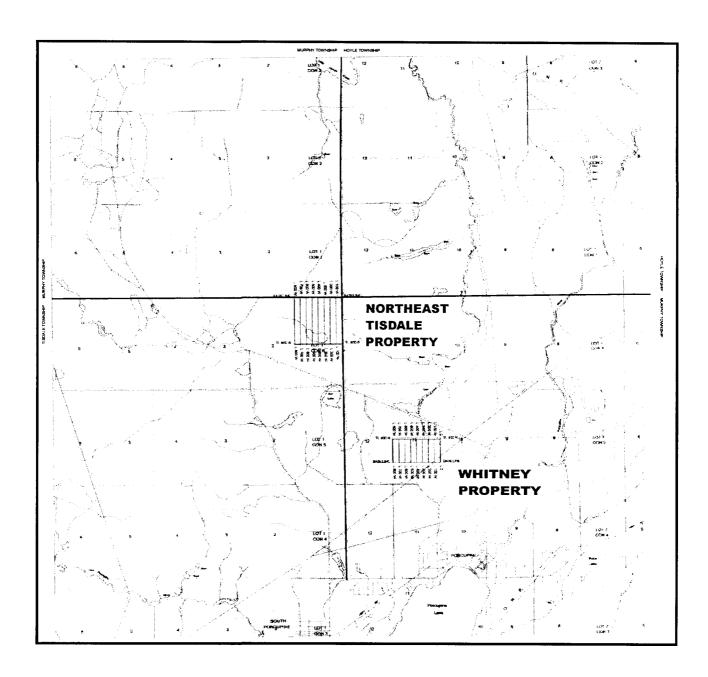


Figure 1: Location and Access Map of the M. Caron Northeast Tisdale Property and Whitney Property, Tisdale and Whitney Townships, Porcupine Mining Division, District of Cochrane, Ontario.

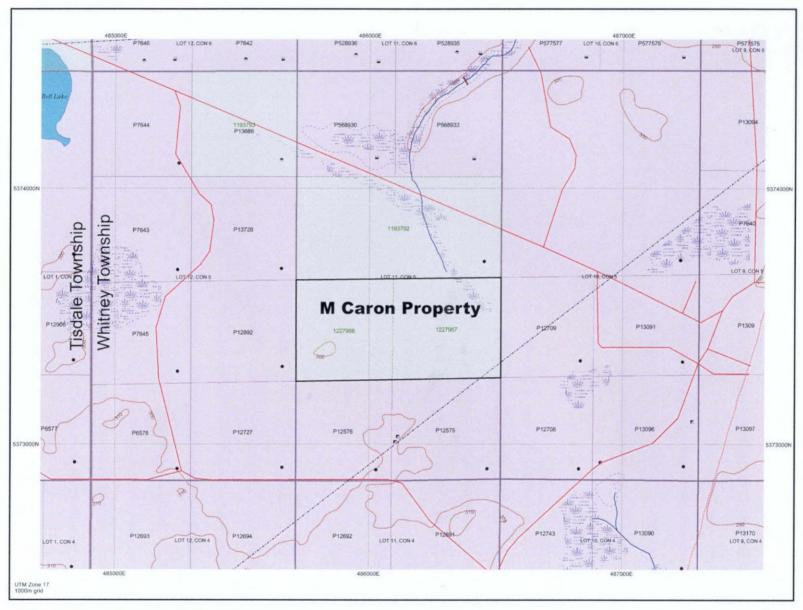


Figure 2: Location and Mining Claims of M. Caron's Whitney Property, Whitney Township, Porcupine Mining Division, District of Cochrane, Ontario.

Table 1: Current Active Mining Claims of M. Caron, Whitney Township, Porcupine Mining Division, District of Cochrane, Ontario

Mining Claim	ng Claim Recording Date Location in Whitney Towns			
P-1227966	1998-June-03	NW1/4 S1/2 Lot 11, Con 5		
P-1227967	1998-June-03	NE1/4 S1/2 Lot 11, Con 5		

# 1.4 PREVIOUS EXPLORATION ACTIVITIES

Geological mapping and studies have been conducted by various authors of the Ontario Bureau of Mines, Ontario Department of Mines, Ontario Geological Survey and the Geological Survey of Canada, notably Burrows (1924), Hurst (1939), Ferguson (1968), Pyke (1982), Pirashco and Kettle (1991) and Pressacco (1999). Several thesis have been completed on the various aspects of the geology and gold mineralization of Tisdale Township and the Porcupine Gold camp.

During 1964, Hollinger Mines Ltd. completed line cutting at 300 foot line separation on their property (mining claims 53114 and 53113) and conducted a magnetic survey and horizontal loop electromagnetic survey. This was followed by four diamond drill holes totalling 2004 feet. The location of these drill holes have been put on the current geological map.

Texas Gulf Canada Ltd held mining claims 611479 and 611478 from 1979 to 1983 as part of a large land package. Most of the exploration work consisting of line cutting, magnetic and HLEM survey and overburden drill was completed in Concession 6, Whitney Township. In 1983, 2 drill holes were completed on the mining claim 577602, which is due north of the current claim 1227967, totalling 1946 feet. A single drill hole W51-03 was completed on mining claim 611478 (current claim 1227967) which intersected several sequences of massive mafic metavolcanics and pillow flows.

During 1989, Belmoral Mines Ltd optioned the Rousseau property, mining claims 1036432 and 1036431. A single northerly drill hole (BR8913) was completed near the centre claim boundary to intersect the gold bearing zones from the Hollinger drilling. The 1000 foot drill hole contained only low gold values.

M. Caron completed 5.2 km of line cutting, total field magnetic survey and a VLF-EM surveys during September, 1999. The baseline was established on the south boundary of the property. The grid lines were cut at 100 metre intervals with pickets every 25 metres.

During 1981, Rio Alto Exploration Ltd held mining claims on the north side of the

property which were 576512 and 577602. The completed line cutting and a magnetic and VLF-EM surveys.

From 1987 to 1990, Mill City Gold Corp. held a large block of mining claims north of the current property with mining claims 932117 and 932116 being located adjacent to the current north boundary. The completed line cutting a magnetic and VLF-EM survey in 1987, overburden drilling and IP survey during 1988 and additional overburden drilling in 1990. Just north of the current northeast corner, the drill hole returned 1069 and 1000 ppb gold in the basal till and 1724 and 1933 ppb gold in the bedrock chips. Another dill hole, 2300 feet west of the above drill hole and near the current northwest corner of the property, returned a value of 11,276 ppb gold in the basal till. It should be noted that on the Mill City compilation map, KC W51-04 was located on their mining claims and not on the current mining claims.

During the 1980's, Newmont Exploration Ltd. held a very large land position of the Broulan and Broulan Reef. The assessment files contains limited information on their diamond drill program.

# 2.0 GEOLOGY & MINERALOGY

# 2.1 REGIONAL GEOLOGY

The Porcupine Gold Camp is located in the Early Precambrian (Archean) Abitibi Greenstone Belt. This easterly trending tectonic belt, 475 by 125 miles in area, is the largest continuous Archean greenstone belt in the Canadian Shield. Located in the southwestern part of the Superior Tectonic Province, the Abitibi belt is truncated east and west by the Greenville Front and the Kapuskasing Structure, respectively.

The following is a short summary of the geology of the Porcupine Gold Camp which has been described by many authors, such as Dunbar (1948), Hogg (1950), Carlson (1967), Ferguson (1968), Leahy (1971), Pyke and Jensen (1976), Pyke (1975, 1980, 1982), Colvine, Fyon, Heather, Marmont, Smith and Troop (1988).

"The lithological units as exposed in the Timmins area are divided into 2 sequences, the Deloro and Tisdale Groups (thought to be separated by the Destor-Porcupine Fault). The older sequence of volcanic rocks approximately 4500 to 5000 metres thick, the Deloro Group (Dunbar, 1948) consists of basal komatiitic flows (Formation I) which are overlain by calc-alkalic basalts and andesite (Formation II) and felsic pyroclastic rocks (Formation III). Interbedded within the felsic volcanic rocks, near the top of the Deloro Group, are oxide and sulphide facies iron formations (Pyke, 1975, 1980a,b, 1982).

A major change from calc-alkalic to komatiitic volcanism marks the beginning of the Tisdale Group which is approximately 4000 metres thick. The lowest formation (Formation IV) consists of ultramafic to basaltic komatiitic to magnesium tholeiitic basalt flows which are overlain by iron tholeiitic basalts (Formation V). The uppermost volcanic sequence (Formation VI) consists of felsic, calc-alkalic pyroclastic rocks (Pyke, 1975, 1980a,b, 1982).

Metasedimentary rocks of the Porcupine Group has an approximate thickness of 3000 metres. This Group consists of interlayed greywacke, siltstone and lesser conglomerate, form part of a turbidite sequence which may be time equivalent to the upper part of the Deloro Group and the entire Tisdale Group (Pyke, 1980a,b, 1982).

Large sill-like medium to coarse grained bodies of dunite and lherzolite were intruded almost entirely within the Deloro Group. Minor epizonal quartz feldspar porphyry were intruded into the metavolcanics. Northeast trending dykes of Middle and Late Precambrian age (Pyke, 1973) while the north trending diabase dykes are probably of Early Precambrian age. A major structural break, the Destor-Porcupine Fault trends northeasterly across the Porcupine Gold Camp (Pyke, 1982).

North of the DPFZ, two periods of folding can be discerned; an original north trending series of folds were subsequently refolded about an east-northeast axis. The main axis of the second period of deformation is delineated by the Porcupine Syncline which in the northeastern part is coincident with the Destor-Porcupine Fault (Pyke, 1982)."

Two major faults, the Destor-Porcupine and Larder Lake faults form prominent structural discontinuities in the rocks of the Timmins-Kirkland Lake area. These two easterly trending faults are cut and offset to the west by many northerly trending faults such as the Benedict-Burrows and Montreal faults. According to Pyke (1982), the Destor-Porcupine represents a fundamental fracture in the Early Precambrian crust and is part of a major east-west fracture zone extending a distance of 440 km from the Kapuskasing Structure to the Grenville Front where it merges with the Cadillac break.

Within the Timmins gold camp the Destor-Porcupine shear zones are at least 150 meters wide, steeply dipping north to vertical and associated with ultramafic volcanism and sedimentation. According to Pyke (1982), the abundance of ultramafic volcanic rocks along and in proximity to the Destor-Porcupine fault suggests that the fault provided a fissure up which ultramafic magma moved up from a source zone in the mantle.

Most of the volcanic rocks in this region typically show a greenschist grade of regional metamorphism. However, in some places a higher grade amphibolite facies is found in recrystallized volcanic rocks at the boundaries of granite batholiths (Jolly, 1978). Prehnite-pumpellyite facies occurs in the volcanic rocks as patchy zones mostly in breccias, amygdaloidal parts of flows, and along fractures. This lower grade metmorphism is thought to be the result of alteration of the rocks as they come in

contact with Archean sea water. It has been suggested that considerable introduction of sodium oxide (albitization) resulted from this contact.

A regional view of gold deposits of the Timmins area from many writers (eg, Pyke, Jensen, Fyon and Crockett...) Has resulted in the synthesis of a model for gold mineralization. The common features and characteristics of these deposits in a regional geological context include the following:

- (a) Most gold deposits seem to be fault controlled. They are either within or in close proximity to east trending faults such as the Hollinger, Porcupine-Destor or larder Lake faults.
- (b) Most gold mineralization is spatially associated to the unconformity between the ultramafic volcanics and the overlying sediments.
- (c) Rock alteration seems to an important control in gold concentration. Carbonitization, silicification and pyritization are among the most prominent alteration types.
- (d) Gold mineralization is also spatially associated to felsic intrusives. These stocks and batholiths of quartz feldspar porphyries and syenite are believed to provide a favorable structural environment or actually to be the source of the hydrothermal gold-rich solutions.
- (e) Emplacement of gold within the shear zones is locally controlled by the relative ductility of the lithology. Where rocks are ductile, there is virtually no porosity and therefore no gold. On the other hand, horizons of brittle rock have a higher porosity and provide sufficient room for gold mineralization.

# 2.2 TERRAIN GEOLOGY

Northern Ontario was glaciated by continental ice sheets at least four times during the Pleistocene. The last glaciation, the Laurentide of Wisconsinan age, is preserved in the area. By late Wisconsinan time ice receded northeast through the area and deposited a variety of surficial materials including extensive ground morainal till. The area was probably ice free about 9,000 years ago. Glaciolacustrine sediments were deposited over the till. Recent organic terrain developed in poorly drained depressions. These glacial and non-glacial deposits, form a discontinuous mantle over the bedrock.

The rolling terrain is characterized by numerous rock knobs. Glaciofluvial deposits of sand and gravel, including occasional kame and esker formations occur a short distance from the claim group. Planar terrain, reflecting the deposits of glaciolacustrine silts and clays, are found in the lowlands.

Local areas of moderate relief and glasciofluvial landforms are generally well drained, even where bedrock occurs close to ground surface. In contrast, poorly drained topographical lows are frequently occupied by wet organic wetland deposits.

# 3.0 CURRENT EXPLORATION ACTIVITIES

The author conducted the geological mapping of the Whitney property on May 6 and 7 with drafting on May 30 and report writing on June 1, 2003.

Only one drill casing was located on the base line at 3+05m West with an azimuth of N127° E dipping 62.5°. The author suspects that this old casing may be that of Banner drill hole No.6. The author has indicated the approximate location of the Hollinger diamond drill holes on the enclosed geological map.

Several pits and trenches are located around and between the outcrop area located in the southwestern portion of the property.

# 3.1 PROPERTY GEOLOGY

Figure 3 represents the results of the geological survey for the Whitney property and is located in the back map folder.

There is only one outcrop area on the property which is located between 5+75 West to 7+25 West and 0+50 North to 2+00 North. The outcrops are elongated in a northeasterly direction and may represent preferential glacial erosion of softer lithological units or shear zones.

The lithological units located are light gray green on fresh surface and weathers buff pale gray to pale gray green with a 5 mm to 7 mm weathering rind. These outcrops consists of pillow and massive magnesium thoeliitic metavolcanics. The most northerly exposure is a variolitic pillow flow overlain by a massive flow then by a massive pillow breccia flow. This later unit contains only a few fragments of pillows. The last unit is a thick massive flow.

The large outcrop on Line 7+00 West has a deep cut which at first may be considered as a trench, however on the west side the continuation of the pillow flow could not be located. The author suggests that this is a fault trending N155° E. On the southeastern side of this outcrop, quartz vein fly rock was located and may have come from the nearby pit. No quartz vein was exposed on surface.

The other outcrop which hosted a quartz vein is located just west of Line 6+00 West at 1+40 North.

Numerous pits and trenches has been excavated by past owners, however, the majority appear to have been dug in overburden.

# 4.0 CONCLUSIONS AND RECOMMENDATIONS

The intersection of 0.24 ounces per ton over 1.5 feet in Hollinger drill hole Number 2 and the several lower grade intersection in hole Number 1 provide encouragement for further exploration activities.

The author would recommend either a HLEM or a pole-dipole IP survey to locate and trace the alteration units which host the gold mineralization.

It is recommended that either a soil or humus geochemical survey be completed to assist in the location of gold bearing mineralization zones.

Upon the completion of the above recommendations and the positive results a limited diamond drilling program may be warranted.

Respectfully submitted,

Dated at Timmins, Ontario June 1, 2003

Kian A. Jensen, B.Sc., P.Geo. Consulting Geologist/Geophysicist

# STATEMENT OF QUALIFICATIONS

- I, Kian A. Jensen, of the City of Timmins, Ontario, do hereby certify that:
- 1. I am currently contracted as a consultant by M. Caron.
- 2. I am a graduate of the University of Waterloo with an Honours B.Sc. In Earth Science, Geology Major (1975).
- 3. I am a member in good standing in the following associations:
  - a) Geological Association of Canada Fellow, 1983
  - b) Association of Geoscientists of Ontario
  - c) Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) as a Professional Geoscientist Member 11004 (1999).
  - d) Association of Professional Geoscientist of Ontario (APGO) Member 0558
- 4. I have been employed as a geologist/geophysicist by various exploration, mining and consulting companies since 1978 and in the Timmins area since 1981.
- 5. I am directly responsible for the work outlined in this report.
- 6. I have no direct interest, nor do I have any shares of any company exploring the properties described in this report, nor on any adjacent or surrounding property.

Dated this 1st day of June, 2003, at Timmins, Ontario

Kian A. Jensen, B.Sc., P.Geo.



# **Work Report Summary**

Transaction No:

W0360.00944

Status: APPROVED

Recording Date:

2003-JUN-03

Work Done from: 2003-MAY-08

**Approval Date:** 

2003-JUN-06

to: 2003-MAY-29

Client(s):

116051

Survey Type(s):

CARON, MICHEL GEORGE

Juivey Type(3).

**GEOL** 

Work Report Details:										
CI	aim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
Р	1227968	\$491	\$491	\$491	\$491	\$0	0	\$0	\$0	2004-JUN-03
Ρ	1227969	\$492	\$492	\$492	\$492	\$0	0	\$0	\$0	2004-JUN-03
Р	1227970	\$491	\$491	\$491	\$491	\$0	0	\$0	\$0	2004-JUN-03
Ρ	1227971	\$492	\$492	\$492	\$492	\$0	0	\$0	\$0	2004-JUN-03
		\$1,966	\$1,966	\$1,966	\$1,966	\$0	\$0	\$0	\$0	•

**External Credits:** 

\$0

Reserve:

\$0 Reserve of Work Report#: W0360.00944

\$0

Total Remaining

Status of claim is based on information currently on record.



42A11SE2026 2.25753

WHITNEY



# **Work Report Summary**

Transaction No:

W0360.00946

Status: APPROVED

Recording Date:

2003-JUN-03

Work Done from: 2003-MAY-06

Approval Date:

2003-JUN-06

to: 2003-JUN-01

Client(s):

116051

CARON, MICHEL GEORGE

Survey Type(s):

**GEOL** 

W	Work Report Details:									
			Perform		Applied		Assign	_	Reserve Approve	
Cla	aim#	Perform	Approve	Applied	Approve	Assign	Approve	Reserve	Approve	Due Date
Ρ	1227966	\$561	\$561	\$561	\$561	\$0	0	\$0	\$0 2	:004-JUN <b>-</b> 03
Р	1227967	\$562	<b>\$</b> 562	\$562	\$562	\$0	0	\$0	\$0 2	:004 <b>-</b> JUN-03
		\$1,123	\$1,123	\$1,123	\$1,123	\$0	\$0	\$0	\$0	

**External Credits:** 

\$0

Reserve:

\$0 Reserve of Work Report#: W0360.00946

\$0 Total Remaining

Status of claim is based on information currently on record.

Ministry of Northern Development and Mines

Date: 2003-JUN-09

Ministère du Développement du Nord et des Mines **Ontario** 

GEOSCIENCE ASSESSMENT OFFICE 933 RAMSEY LAKE ROAD, 6th FLOOR SUDBURY, ONTARIO P3E 6B5

Tel: (888) 415-9845 Fax:(877) 670-1555

MICHEL GEORGE CARON 253 LOIS CRESCENT TIMMINS, ONTARIO P4P 1G7 CANADA

Dear Sir or Madam

**Submission Number:** 2.25753

Transaction Number(s): W0360.00944

W0360.00946

# **Subject: Approval of Assessment Work**

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Ron Gashinski

Senior Manager, Mining Lands Section

Por Cooking.

Cc: Resident Geologist

Michel George Caron

(Claim Holder)

Assessment File Library

Michel George Caron (Assessment Office)



42A11SE2026 2.25753

WHITNEY

200

1115248 1115249 1115291

1114818 1114817

ONTARIO CANADA

MINISTRY OF HORTHERN DEVELOPMENT AND MINES

Mining Land Tenure Map

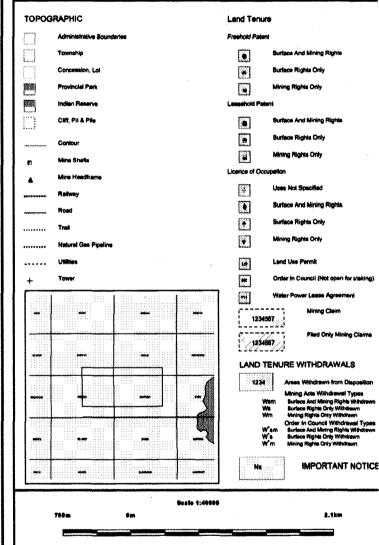
Date / Time of Issue: Fri Jun 06 16:36:41 EDT 2003

**TOWNSHIP / AREA** WHITNEY

PLAN G-3975

# **ADMINISTRATIVE DISTRICTS / DIVISIONS**

Mining Division Porcupine Land Titles/Registry Division COCHRANE Ministry of Natural Resources District **TIMMINS** 



LAND TENURE WITHDRAWAL DESCRIPTIONS

Jan 1, 2001 RES

Jin 1, 2001 APPLICATION PENDING UNDER PUBLIC LANDS ACT SURFACE R Jan 1, 2001 FLOODING RIGHTS RESERVED TO THE CROWN - DUCKS UNLIM Jan 1, 2001 APPLICATION PENDING UNDER PUBLIC LANDS ACT SURFACE F W.P.23/06 May 29, 1996 THE SURFACE AND MINING RIGHTS ARE WITHDRAWN FROM PR

114819 1114818 1115251 (1115250) 1115290 PARTS LOTS, CONT LOT 12, CON 1 LOT 8, CON 1 111525 1114973 P90074 P28425 1115255 1115254 1114976 111497 P96393 P90075 P13082 1182657 P13657 1227971 P11324 P7802 P1206( P13278 P18279 - P13568 1227969 - 1227968 P7884 216909 | P891288 Philip Pilip P536915 P536914 P51270 P834149 LEFF CONE People People 1193768 13080 -12075 111376 1226675 LOT IL CONS P6339 P6340 P13625 P7603 77583 P10222 13206 P14828 P434 P7841 P19824 P19820 P42972 P12762 P14197 P12976 P6270 riget Horrara, Pariora, Pagrana P13206 P13594 P7642 PB101 P14844 825784 P12612 P12811 P13538 P6267. 831840 GEO #135kg P255 P6454 P13943 P13785 P7843 -0127RT P12906 913576 P13087 P14507 P14932.5 P14933.5 P13830 P13091 213794 1227986 122796 P12892 P13634 948856 P13731 948857 P12576 #12575 P13536 P12781 / P50863 P12708 P(3097 1229276 P12727 P13096 P12001 912743 143090 P13667 946855 P13688 948858 P7949 1236319 P8360 P6364 P13170 1236322 P13589 MB0B1B 1236320 P12893 P13239 PISTE P18710 12804 LOT 2 CON 4 P14034 J.F. P13053 P6271 P6272 P12960 P12914 P13349 P12008 P13272 P19904 P19912 P2917 Platib Piake **#12978** P199031. P(4497 P13271 P13273 P19902 P14495 P12795 P13**1**0 LOTE CON LOT 3 CON 3 LOT 2. CON 3 P13743 . ( P14136 P13315 P43276 P13277 14248 P13399 1236278 P8431 1230280 1236279 P13395 P1930 1229416 0042 LOT 4: CON 2 P13713 1227965

Those wishing to stake mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources.

The information shown is derived from digital data evallable in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Northern Development and Mines web site.

Contact Information:

Toll Free Map Datum: NAD 83

Provincial Mining Recorders' Office

Tel: 1 (888) 415-9845 ext 5785jection: UTM (6 degree)

Willed Green Miller Centre 933 Ramaey Lake Road

Sudbury ON P3E 685

Fax: 1 (877) 670-1444

Mining Land Tenure Source: Land Information Ontario

Mining Land Tenure Source: Provincial Mining Recorders' Office Home Page: www.mndm.gov.on.cs/MNDM/MINES/LANDS/mismnpge.htm

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