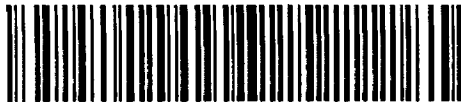


52 F / 16 NW - 0055 - A1

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53F16NW0120 52F16NW0055A1 WEBB

010

2.4366

GEOLOGICAL REPORT

WEBB TOWNSHIP PROPERTY

WEBB TOWNSHIP

PATRICIA MINING DIVISION

DISTRICT OF KENORA

ONTARIO

**RECEIVED**

DEC - 7 1981

**MINING LANDS SECTION**

NOVEMBER, 1981



53F16NW0120 52F16NW0055A1 WEBB

010C

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ACCOMPANYING MAPS

Drawing # 1 - Geological Map Scale: 1 inch to 200 feet

A: INTRODUCTION

The property consists of nine contiguous claims which are located in Webb Township, in the Dryden Area, northwestern Ontario. Eight of the claims (Pa 490451, 490452, 490453, 490454, 490455, 533132, 533133, and 533134) are held under option from Mr. R. Fairservice of Dryden, Ontario, by Patino Mines (Quebec) Limited. Claim Pa 578718 is held by Patino Mines (Quebec) Limited.

During the summer of 1980, line cutting totalling 4.88 miles was carried out on the property. Subsequent electromagnetic and magnetic surveys were conducted during October, 1980. Geological mapping was completed in September, 1981 by the author.

B. LOCATION AND ACCESS

The claim group is located in the west-central portion of Webb Township, approximately 17 miles (27 km) northeast from the town of Dryden, Ontario. The property is situated at the eastern end of Gullwing Lake.

The property is accessible from Dryden via Highway 601 to the municipal airport and Ghost Lake Road (forestry access road) which runs in a northeast direction, south of Gullwing Lake. This forestry road runs near the southeast corner of the property. A narrower gravel road which connects to the access road cuts across the southwest corner of the claim group. A trail provides access to the eastern part of the property.

C. TOPOGRAPHY

Extensive outcrop exposure occurs in the southwest part of the map area and forms a prominent 50 to 100 foot (15 to 30 m) high ridge. The remainder of the map area is overlain by a thick cover of sandy glacial till. A few large outcrops occur to the north of the claim group.

The area has been previously lumbered and a second growth of jack pine, poplar, and raspberry cane covers the map area.

D. PREVIOUS WORK

The earliest recorded work done on the ground currently held by Patino Mines (Quebec) Limited was by Mr. Cosmo Coates of Dryden, Ontario in 1906. Coates discovered a molybdenite occurrence within pegmatite dykes which are situated on the Patino grid near L28 00W at 4N. Coates carried out surface work until about 1940. This consisted of several test pits, no assays of Mo are available. In one pit molybdenite, pyrite, pyrrhotite and malachite stain occur. It was stated that the amount of molybdenite present is less than one percent.

In the period 1969 to 1973 Mr. M. Woirowicz of Dryden, Ontario also performed work which consisted of trenching and diamond drilling. These holes were drilled in the proximity of gossaned amphibolites.

DDH #1 (vertical, 108 feet deep) was collared at the approximate location of the baseline and (44+00 W on the present Patino grid). DDH #2 (vertical, 103 feet long) was collared at the approximate location of the baseline and L46+00W. Both holes intersected mainly mafic volcanics (amphibolites) which contained minor sulphides. Minor amounts of pegmatite were intersected in DDH #2.

On claims immediately to the southwest of the Patino claims the Canadian Nickel Company Limited (INCO) conducted some previous diamond drilling in 1970. One hole was drilled (-60°) to a depth of 324 feet. Mainly amphibolite with lesser paragneiss (metasediments) was intersected. Several sections of 1% pyrite and pyrrhotite and chalcopyrite were reported over 1 to 7 feet. One intersection of massive sulphides was 80% pyrite, 1% pyrrhotite and 20% chalcopyrite over 2.5 feet.

During October, 1980 and September, 1981 magnetometer and electromagnetic (EM-16) surveys were conducted over the property by Patino exploration personnel. The surveys were done using a previously cut grid with lines spaced every 400 feet. Separate reports covering these surveys have been filed for assessment credit and only the results will be briefly discussed in a later section of Geophysical Results.

E. GENERAL GEOLOGY

The Webb Township area is underlain by north-east striking Early Precambrian metavolcanic rocks. According to Page and Christie (1980), the volcanic rocks consist of: 1- fine-to-medium-grained amphibolites (mafic metavolcanic rocks) which are locally layered and garnet-bearing; 2- intermediate tuff-breccia, lapillistone and crystal lithic tuff; and 3- felsic lapilli tuff, breccia and locally garnet-biotite-muscovite-plagioclase-quartz schist. In the southeast corner of the township, the area is underlain by biotite-feldspar-quartz garnet schists of metasedimentary origin (quartzose). A small wedge of pebbly feldspathic arenite occurs in the southwest and northeast corners of the township. The central portion of the township is cross-cut by a foliated biotite granodiorite-quartz monzonite which is locally cataclastic. Several small pegmatite dykes of the same unit (biotite-muscovite-quartz-microcline-plagioclase pegmatite, garnet-muscovite-microcline-quartz-plagioclase pegmatite and various other pegmatites) cross-cut the mafic metavolcanic rocks in the west-central area of the township.

F. GEOLOGY OF THE WEBB TOWNSHIP PROPERTY

The geology consists of E-W striking, southward dipping (50-55°) amphibolites (1) intercalated with minor amounts of rhyolite (2). These are bordered on the north by a narrow sequence of biotite-quartz gneisses (3). Some foliated quartz manzonites (4) are located just north of the property. White pegmatite dykes (5) intrude and are

located mainly within amphibolites. Aplite dykes (6) intrude the biotite-quartz gneisses (see map).

TABLE OF GEOLOGICAL UNITS

EARLY PRECAMBRIAN

FELSIC INTRUSIVE ROCKS

- (6) Aplite dykes
- (5) White pegmatite dykes
- (4) Foliated quartz monzonite

METASEDIMENTARY ROCKS

- (3) Biotite-quartz gneisses

FELSIC METAVOLCANIC ROCKS

- (2) Rhyolite

MAFIC METAVOLCANIC ROCKS

- (1) Amphibolite

(1) AMPHIBOLITE

The amphibolites have dark to medium green weathered surfaces with dark green to black fresh surfaces. Two types of amphibolite were recognized: (1a) amphibolite gneisses and (1b) massive amphibolites. The medium-grained amphibolite gneisses (1a) are partly migmatized hornblende + biotite + feldspar + quartz gneisses with hornblende biotite. Minor garnets were observed in one outcrop. The amphibolite gneisses probably represent mafic metavolcanics (basalts) but no primary volcanic features were recognized.

Massive amphibolites (1b) are common along the northern edge of the amphibolite unit and on L 28 W between 1+00S and 2+00S. The rock



type is characterized by a slightly schistose to massive, knobbily, coarse-grained weathered surface which is a dark to medium green colour. The fresh surface is dark green to black. It consists of approximately 50% amphiboles, 40% plagioclase feldspars and lesser biotite. The coarse-grained nature of the massive amphibolites suggests that the unit may represent possibly metamorphosed hypabyssal basalt-gabbro rock types within the basalt volcanic pile.

(2) RHYOLITE

The rhyolites are characterized by a light cream-buff coloured weathered surface and a white-pink fresh surface. They consist of siliceous flows and tuffs (felsic, muscovite schists) which are typically fine-grained and schistose with 10% quartz eyes and 5% biotite in the flow material. Generally they occur as narrow bands 20-30 feet wide (maximum width 80 feet) which are traceable along strike for 100-200 feet. Since the unit serves as a good marker horizon which is traceable, it illustrates the complex, tight folding within the area. Most of the rhyolite occurs in the main outcrop near the baseline between L 36 W and L 24 W.

(3) BIOTITE-QUARTZ GNEISSES

The biotite-quartz gneisses are medium-grained, schistose and migmatized. The rock consists of 40-50% biotite, 40% quartz and 10% hornblende. One to two CM. wide "Sweats" of quartz-feldspar material are common and constitute the leucosome portion of the migmatite.

The biotite-rich part called the paleosome makes up the remainder.

The weathered surface is a dark grey colour while the fresh surface is grey-black in colour.

The rocks probably represent metasediments such as greywackes or other poorly sorted clastic sediments which are also well bedded.

Biotite-quartz gneisses form a narrow E-W trending sequence of meta-sedimentary rocks which borders the amphibolites to the north.

(4) QUARTZ MONZONITE

The strongly foliated quartz monzonites are coarse-grained and have characteristic light pink-white coloured weathered and fresh surfaces. The rocks consist of 70% feldspar (2/3 of these K-feldspar), 20-25% quartz with 5-8% biotite. Texturally, the original igneous fabric is completely recrystallized. The only outcrop areas of quartz monzonite are just north of the Webb Township property (see map).

(5) WHITE PEGMATITE DYKES

These dykes are characterized by their white coloured fresh and weathered surfaces but more importantly by their graphic-eutectic type textures which consist of coarse-grained potassium feldspars (50-60%) and quartz (30%) with 5-10% muscovite. The white pegmatite dykes are located mainly within the large mass of outcrop near 2+00 S between L 36 W and L 24 W where they occur as several 20-30 feet wide dykes

which intrude the amphibolite gneisses. Usually the dykes can be traced over a distance of 100-300 feet and either dip 70-80° or vertically.

(6) APLITE DYKES

Aplite dykes are distinguished from pegmatite dykes on the basis of texture as well as colour. The coarse-grained aplite dykes have a salmon pink colour and do not exhibit the intergrown quartz feldspar textures that the pegmatites do. The quartz that is present (up to 40%) occurs as discrete segregations and veins, etc.

Aplite dykes occur only within the metasedimentary biotite-quartz gneisses (3) where they form 5-20 ft. wide, regularly spaced, N-S striking dykes together with lesser E-W striking aplite dykes.

What is of particular interest is that the aplite dykes often carry erratic amounts of Molybdenite (trace to 4% locally).

G- ECONOMIC GEOLOGY

Minor pyrite and trace chalcopyrite occurs within slightly gossaned amphibolites located along the baseline near L 44+00W. Several pits are found in the area. Assays from one of these samples indicates 0.12% Cu and 0.028% Mo.

Various pits and trenches are located within aplite dykes which carry erratic amounts of molybdenite (trace to 4% (no assays)).

Also of economic interest are two sets of muscovite-bearing white pegmatite dykes which intrude the amphibolite gneisses near 2+00S between L 36+00N and L 24+00W. Similar dykes on the neighbouring Selco property reportedly carry some tantalite (tantalum) and polucite (cesium). Although no tantalite or polucite was observed and/or recognized on the Patino claims, some sampling of the dykes was completed.

#### H- GEOPHYSICAL RESULTS

During October, 1980 and September, 1981 magnetometer and EM-16 surveys were conducted over the property by Patino exploration personnel.

- The magnetometer survey outlined various long, linear magnetic high anomalies. These probably represent areas of greater magnetite concentrations in the underlying amphibolites.

The EM-16 survey outlined several E-W striking, weak conductors, the majority of which probably represent slightly conductive zones at the outcrop-overburden interface. One E-W conductor is however located in the area of gossaned amphibolites (baseline at L 44+00W). This could be a weak sulphide conductor.

#### I- SUMMARY AND CONCLUSIONS

The map area is underlain by amphibolites (mafic metavolcanics) with minor rhyolites which are overlain by metasedimentary biotite-quartz gneisses. To the north this sequence is bordered by quartz monzonites.

Some slightly gossaned amphibolites which contain minor pyrite and trace chalcopyrite do occur on the property but this area has been previously drilled and no significant sulphides were detected.

Minor and erratic Mo-mineralization on the property is restricted to aplite dykes. Various pits are located in these places. The nature of the mineralization seems to be too minor and irregular to be of economic significance.

Possibilities also exist for some minor tantalum and cesium mineralization in several white pegmatite dykes (between L 36+00W and L 24+00W from 2S to the baseline). Assays from these samples will determine this.

It is recommended that a detailed EM check be made on the EM-16 conductors, particularly the one by the gossaned amphibolites to determine if it might represent weakly disseminated sulphides.



Peter Born,  
November, 1981

REFERENCES

Page R.O. and Christie, B.J.

1980:

Lateral Lake Area (West half), District of Kenora; Ontario Geological Survey Preliminary map. P. 2371, Geological Series. Scale 1:15,840 or 1 inch to  $\frac{1}{4}$  mile - Geology 1979.

M. Waitowicz

1973

Report on diamond drilling and trenching including drill logs and location sketches. Assessment Files, Resident geologist office, Min. Nat. Res., Sioux Lookout, Ontario.

Canadian Nickel Co. Ltd.

1971

Report on diamond drilling including drill logs and location sketch. Assessment files, Resident geologist office, Min., Nat, Res, Sioux Lookout, Ontario.

Coates Occurrence  
Kenora District  
Webb Township

Ontario Ministry of Natural Resources,  
Ontario Geology Survey., Geoscience data  
centre

Mineral Deposit Inventory Record  
(MDIR)



53F16NW0120 52F16NW0055A1 WEBB

900



Ministry of Natural Resources

File \_\_\_\_\_

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

RECEIVED  
DEC - 7 1981  
MINING LANDS SECTION

Type of Survey(s) Geological  
 Township or Area Webb Twp.  
 Claim Holder(s) PATINO MINES (QUEBEC) LIMITED  
 Survey Company PATINO MINES (QUEBEC) LIMITED  
 Author of Report PETER BORN  
 Address of Author % Box 8000, CHIBOUGAMA, QUE. G8P 2L1  
 Covering Dates of Survey Sept. 1 - Dec. 1, 1981  
 (linecutting to office)  
 Total Miles of Line Cut 5.7 miles

MINING CLAIMS TRAVERSES	
List numerically	
<u>Pa</u>	<u>490451.</u> ✓
(prefix)	(number)
	<u>490452.</u> ✓
	<u>490453.</u> ✓
	<u>490454.</u> ✓
	<u>490455.</u> ✓
	<u>533132.</u> ✓
	<u>533133.</u> ✓
	<u>533134.</u> ✓
	<u>528712.</u> ✓
TOTAL CLAIMS <u>9</u>	

**SPECIAL PROVISIONS CREDITS REQUESTED**

ENTER 40 days (includes line cutting) for first survey.	Geophysical	DAYS per claim
	- Electromagnetic	_____
	- Magnetometer	_____
	- Radiometric	_____
	- Other	_____
ENTER 20 days for each additional survey using same grid.	Geological <u>20</u>	
	Geochemical	_____

**AIRBORNE CREDITS** (Special provision credits do not apply to airborne surveys)

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

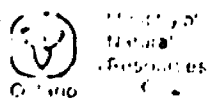
DATE: Dec. 1, 1981 SIGNATURE: Peter Born  
Author of Report or Agent

OFFICE USE ONLY

Res. Geol. \_\_\_\_\_ Qualifications 2.3604

Previous Surveys

File No.	Type	Date	Claim Holder
			<u>PB</u>



Part of Work (Geophysical, Geological, Geochemical and Expenditure) **Webb Twp. M-1874 # 81-126**  
 Ministry of Natural Resources

52 F 15 NE (25) L.R.  
 Instructions - Enter type of print  
 - If number of mining claims traversed exceeds space on this form, attach a list  
 Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
 - Do not use shaded area below.

**RECEIVED**

Type of Survey(s) Geological Year 1982 Township or Area WEBB TWP.  
 Claim Holder(s) PATINO MINES (QUEBEC) LIMITED Resident Geologist SIoux LOOKOUT Prospector's Licence No. T 933  
 Survey Company PATINO MINES (QUEBEC) Survey Dates (linecutting to office) 01 09 81 01 12 81 Total Miles of line Cut 5.7  
 Name and Address of Author (of Geo. Technical report) PETER BORN  
Box 800, CHIBOUGAMA, QUE. G8P 2L1

Instructions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
For each additional survey using the same grid: Enter 20 days (for each)	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	<b>20</b>
	Geochemical	

Man Days Instructions	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)  
 Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures	Total Days Credits
\$ <u>          </u> + <b>15</b> = <u>          </u>	

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Report Completed  
 Date of Report: Dec 1, 1981  
 Recorder Holder or Agent (Signature): Peter Born

Certification Verifying Report of Work  
 I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: PETER BORN  
Box 800, CHIBOUGAMA, QUE.

Mining Claims Traversed (List in numerical sequence)					
Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
Pa	490451	20			
	490452	20			
	490453	20			
	490454	20			
	490455	20			
	533132	20			
	533133	20			
	533134	20			
	578718	20			

PATRICIA MINING DIV  
**RECEIVED**  
 DEC - 7 1981  
 9 AM  
 12:45 PM

Total number of mining claims covered by this report of work: 9

**For Office Use Only**

Total Days Credits Recorded: 180  
 Date Recorded: Dec 5, 1981  
 Mining Recorder: [Signature]  
 Regional Branch Director: [Signature]

Date Certified: Dec 1, 1981  
 Certified by (Signature): [Signature]



Webb Twp. (M-1874)

PROJECTED LINE

WEBB TWP

M. 1874

Scale  
1" = 40 chns

Bluell Cr.

Needle

52 F / 15 NE Bluett

52 F / 16 NW

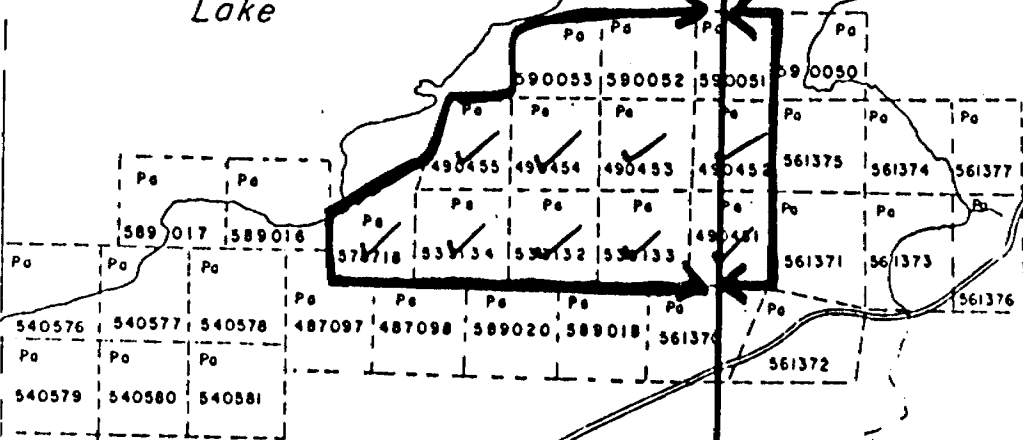
Gullwing

Lake

Drope Twp. (M-1847)

LINE

PROJECTED



Pa  
589021  
Pa  
589022  
Pa  
589019  
Pa  
594075

Beartrack

5M

4M

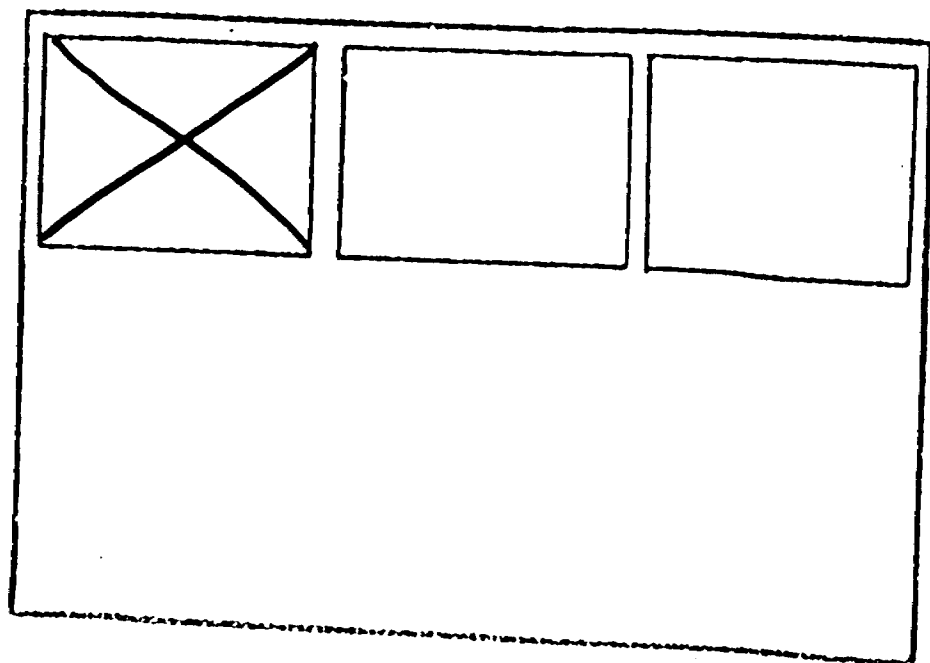
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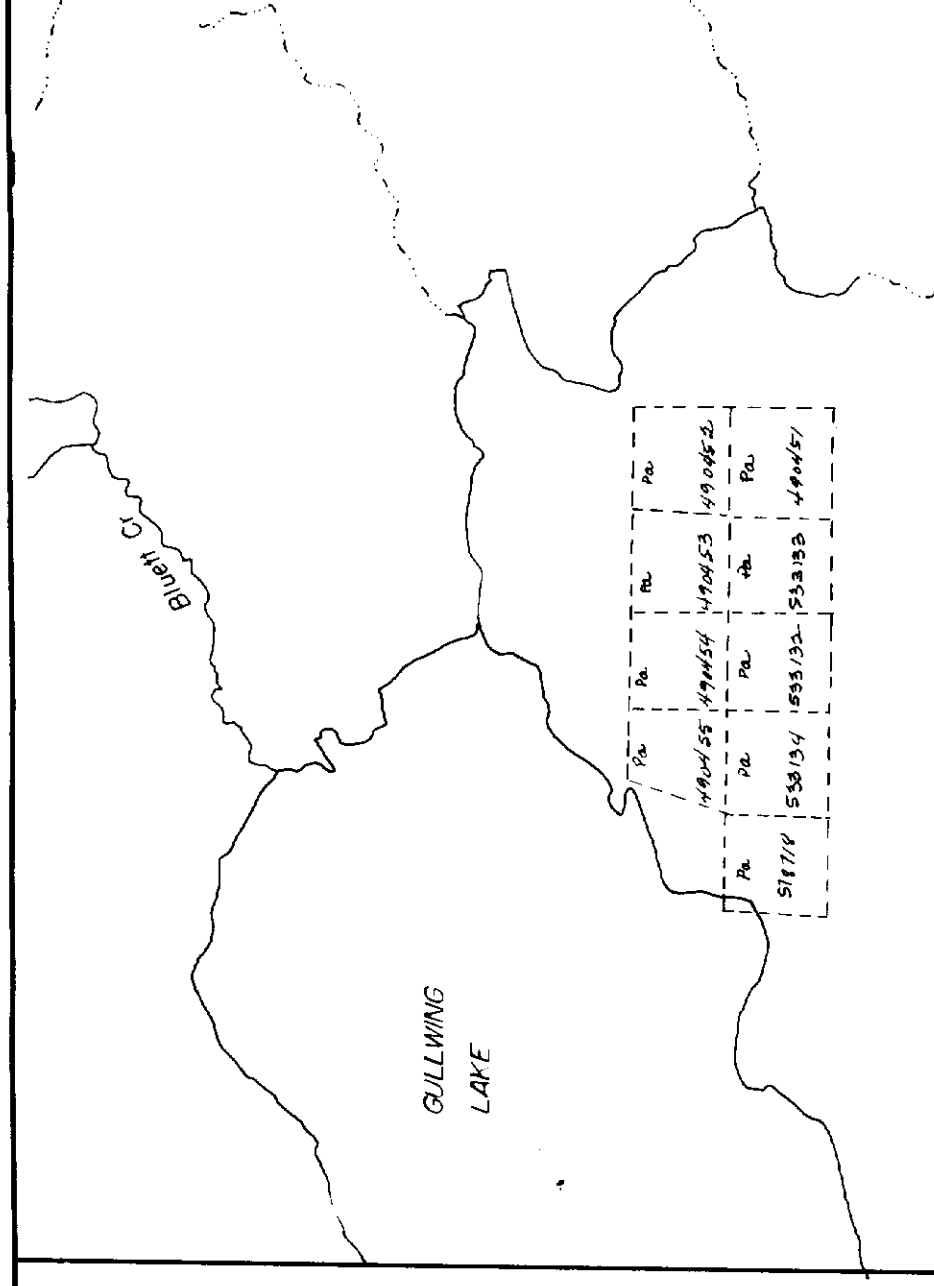
Laval Twp. (M-3370)

SEE ACCOMPANYING  
MAP(S) IDENTIFIED AS

S2 F/16 NW-0055-A1 #1

LOCATED IN THE MAP  
CHANNEL IN THE FOLLOWING  
SEQUENCE (X)





LOCATION MAP  
**WEBB TWP PROPERTY**  
 WEBB TOWNSHIP, ONTARIO  
 SCALE: 1 INCH = 1/2 MILE

**LEGEND**

EARLY PRECAMBRIAN  
 FELC INTRUSIVE ROCKS

- 16 ASPHALT DIKE-OFTEN MOUREBENTE BEARING
- 5 WHITE PERMATITE DIKES
- FOULATED QZ MONZONITE

METASEDIMENTARY ROCKS

- 3 BOTITE QZ ONESSES-PARTLY NUBRIZED

FELC METACALCIC ROCKS

- 2 RHYOLITE FLOW-TUFFS (FRESH STATE)

METACALCIC ROCKS

- AMPHIBOLITE
- AMPHIBOLITE ONESSES (PARTLY NUBRIZED)
- MASSIVE AMPHIBOLITE

SYMBOLS

- EXENT OF OUTCROP
- EXENT OF SUB-OUTCROP
- EXENT OF GLACIAL HUMMOCKS, RIDGES
- △ BOLLERS
- △ FIRST HEAVE
- △ FRENCH PIT
- CLAIM POST LOCATION, AROUND INFERRED
- GEOLOGICAL CONTACT
- VEINING: VERTICAL, DIPPING
- FOLIATION: VERTICAL, DIPPING



**PATINO MINES QUEBEC LIMITED**  
 EXPLORATION DEPARTMENT

GEOLGY  
**WEBB TWP PROPERTY**  
 WEBB TOWNSHIP, ONTARIO

Drawn by: P.B. Date: 11/20/05  
 Checked by: P.B. Date: 11/20/05  
 Cont'd by: P.B. Date: 11/20/05

52 F/16 NW-0055-A1-1

