



42A02NW0030 2.7404 FALON

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A

GEOLOGICAL SURVEY  
FOR ASSESSMENT WORK CREDIT  
ON THE  
MEUNIER CLAIMS  
IN  
FALLON TOWNSHIP, ONTARIO  
PORCUPINE MINING DIVISION

By

R.P. Bowen, P.E.

1984



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## QUALIFICATIONS OF THE WRITER

### EDUCATION:

B.S. Geological Engineering, Michigan Technological University, 1970.  
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Diploma Geological Science, McGill University, 1972.  
M.Sc. (Applied) Minerals Exploration, McGill University, 1973.

### EXPERIENCE:

Summers 1969 - 1973: Ontario Geological Survey.  
January 1974 - December 1975: Exploration Engineer, Tenneco Mining Inc., Lathrop Wells, Nevada.  
March 1976 - August 1978: Geological Engineer, Rosario Resources Corp., Toronto, Ontario and Tucson, Arizona.  
August 1978 - April 1980: Law School and private consulting including teaching at Wayne State University, Detroit, Michigan.  
April 1980 - April 1981: Geologist, Ontario Geological Survey, Toronto, Ontario  
May 1981 to Sept. 1983: Project Geologist, Newmont Exploration of Canada Ltd., Timmins, Ontario.  
Sept. 1983 to present: Senior Exploration Geologist and Manager of the Timmins Field Office, Newmont Exploration of Canada Ltd., Timmins, Ontario.

### PROFESSIONAL AFFILIATIONS

Society of Mining Engineers of the American Institute of Mining, Metallurgical and Petroleum Engineers.  
Canadian Institute of Mining and Metallurgy.  
Prospectors and Developers Association.  
American Society of Photogrammetry.  
Society of Economic Geologists.  
Association of Professional Engineers of the Province of Ontario.



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11 SEP 1984

ABSTRACT

This report covers the results of a geological survey on 184 mining claims held by Mr. David J. Meunier in Fallon Township, Porcupine Mining Division, Ontario.

Mafic to felsic metavolcanic flows and pyroclastics of Archean Age have been intruded by felsic and mafic plutonic rocks along zones of structural weakness. Metamorphism is greenschist to lower amphibolite facies. Cobalt Group sedimentary rocks unconformably overlie these Archean rocks in the southwestern portion of the claim group.

Mineralization to date has been sparse, but, several conductors have been picked up by VLF EM methods and may be mineralized flow tops or other interflow units and these should be further investigated.

## INTRODUCTION

### HISTORY

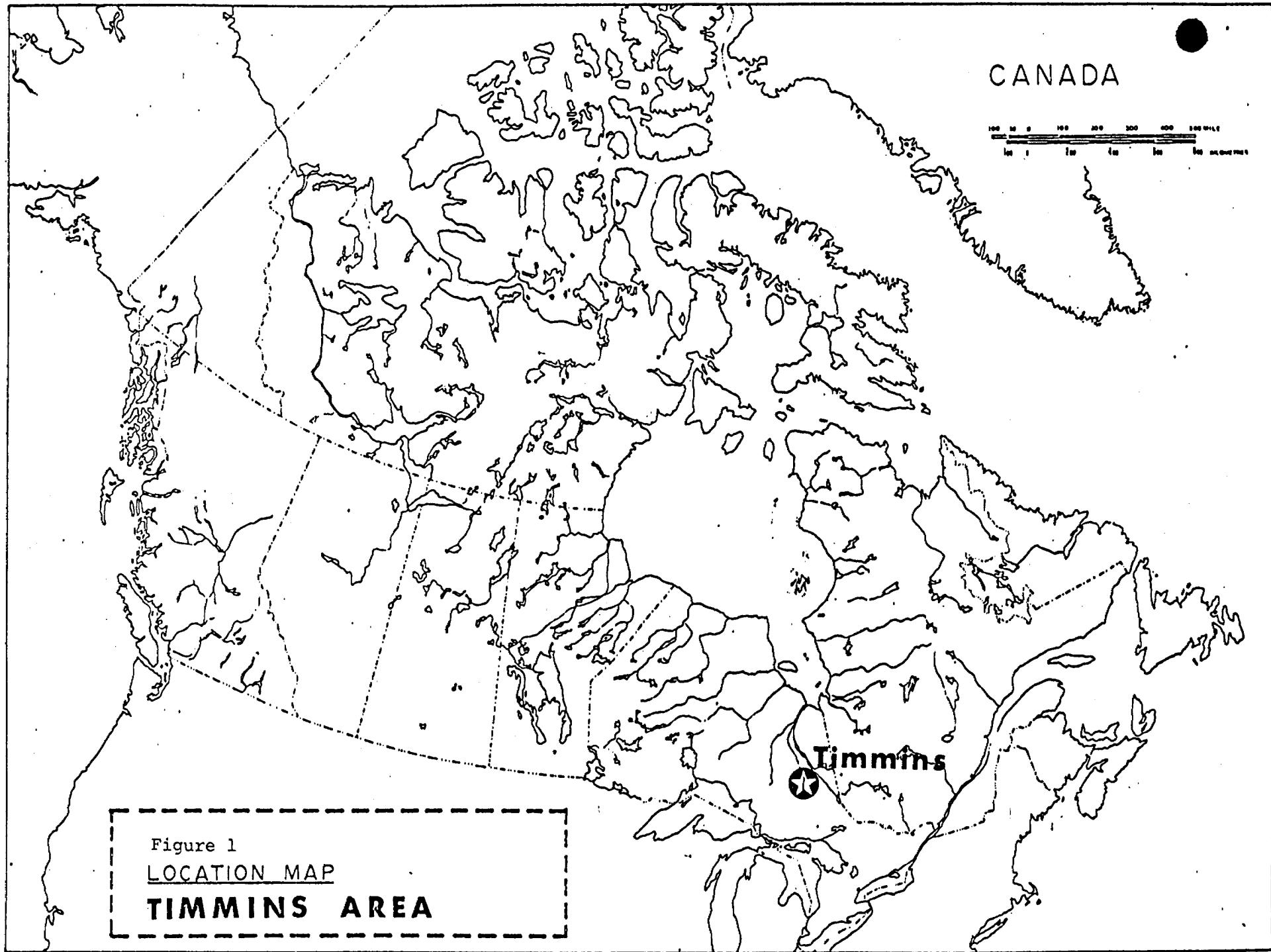
The purpose of this report is to describe the work done on the Meunier Claims in Fullon Township, Ontario. This report is one in a series of geology and geophysical reports on some 196 claims staked by Mr. David Meunier of South Porcupine. This report is to be filed for assessment work credit.

Mr. Meunier has been active in this area for several years exploring both for base and precious metals and has staked numerous blocks of claims, many of which have been optioned to major mining companies for detailed exploration programs.

This area lies south of, and makes up the southern boundary of the Shaw Dome. Stratigraphy of the Timmins camp was proposed by Ferguson et al (1968) and extended to the surrounding area by Pyke (1982). It is these stratigraphic relationships that the author adheres to in this report.

Since 1909 mines in Timmins have produced in the neighborhood of 60,000,000 ounces of gold. Numerous gold and basemetal mines have been discovered and extensive prospecting has occurred during the

intervening years. The fact that at least four (4) new mines in the area are scheduled to go into production in 1984 or 1985 certainly makes the area a good prospecting bet.



## LOCATION AND ACCESS

The claims covered in this report are in Fallon Township, Porcupine Mining Division, District of Timiskaming, Ontario. Fallon Township is in NTS area 42A/2 which is roughly  $80^{\circ} 55'$  west longitude and  $48^{\circ} 15'$  north latitude. This is UTM grid zone 17, 499600 east by 5344800 north. Figure 1 shows the general location of Timmins while Figure 2 shows the relative location of Fallon Township.

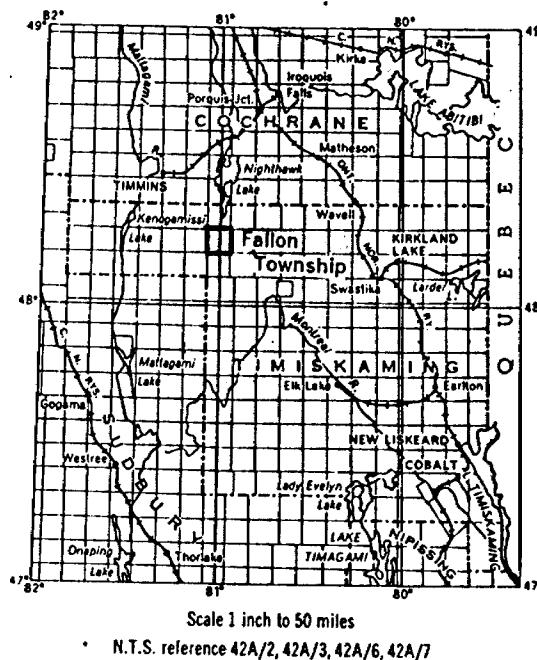


Figure 2 - General location of Fallon Township

Access to the property may gained by taking the Lanesmuir Road south from South Porcupine through Whitney, Shaw and Eldorado Townships into Lanesmuir Township. Just past the road into the Carshaw Mine a logging road branches south into Fallon Township. This road provides access to the Night Hawk Timber Company (Stringer interests) logging camp with subsidiary roads to the southern group of claims.

The claims covered in this report can most easily be reached by a new road being driven east by the Stringer interests from the main south trending logging road mentioned above. This road will cross the Night Hawk River eventually.

The Night Hawk River may be navigated during certain times of the year and this method of travel gives access to the eastern claims from German Bay of Night Hawk Lake.

RECORDED HOLDER

David Meunier, Prospector's License M-17157, of 403  
Dome St., South Porcupine, Ontario is the recorded holder  
of these claims.

SUBMITTING PARTY

R.P. Bowen, P.E., of P.O. Box 5010 PMS, South  
Porcupine is the submitting party of this report for Mr.  
Meunier.

• CLAIMS SURVEYED AND DATES OF SURVEY

The immediately following pages list the claims covered by this survey. Claims P. 663009 through P. 663018 inclusive and claims P. 663295 and P. 683355 are excluded as they were covered under an earlier survey. Figure 3 shows the relative location of the Meunier claim block in Fallon Township.

Linecutting took place during the spring and summer of 1983 and late summer 1984 on the four newly staked claims P. 803940 through P. 803943.

The geological survey was conducted during the summer of 1983 and summer of 1984. Report writing was ongoing during the various phases of the geological mapping.

MEUNIER CLAIMS IN FALLOON TOWNSHIP

No.	Claim No.	Anniversary Date
1.	P. 653259	12 September 1982
2.	P. 653260	12 September 1982
3.	P. 653261	12 September 1982
4.	P. 653262	12 September 1982
5.	P. 641742	27 September 1982
6.	P. 641743	27 September 1982
7.	P. 653908	27 September 1982
8.	P. 653909	27 September 1982
9.	P. 641738	28 September 1982
10.	P. 641731	28 September 1982
11.	P. 641732	28 September 1982
12.	P. 641733	28 September 1982
13.	P. 641734	28 September 1982
14.	P. 661936	28 September 1982
15.	P. 654191	28 September 1982
16.	P. 654192	28 September 1982
17.	P. 654193	28 September 1982
18.	P. 654194	28 September 1982
19.	P. 654195	28 September 1982
20.	P. 654196	28 September 1982
21.	P. 654197	28 September 1982
22.	P. 654198	28 September 1982
23.	P. 663269	25 October 1982
24.	P. 663270	25 October 1982
25.	P. 663271	25 October 1982
26.	P. 663272	25 October 1982
27.	P. 663273	25 October 1982
28.	P. 663274	25 October 1982
29.	P. 663275	25 October 1982
30.	P. 663276	25 October 1982
31.	P. 663277	25 October 1982
32.	P. 663278	25 October 1982
33.	P. 663279	25 October 1982
34.	P. 663280	25 October 1982
35.	P. 663907	12 November 1982
36.	P. 663908	12 November 1982
37.	P. 663909	12 November 1982
38.	P. 663910	12 November 1982
39.	P. 663911	12 November 1982
40.	P. 663912	12 November 1982
41.	P. 663913	12 November 1982
42.	P. 663914	12 November 1982
43.	P. 663915	12 November 1982
44.	P. 663916	12 November 1982
45.	P. 683356	26 November 1982
46.	P. 683357	26 November 1982
47.	P. 683358	26 November 1982
48.	P. 683359	26 November 1982
49.	P. 683360	26 November 1982
50.	P. 683361	26 November 1982
51.	P. 683362	26 November 1982
52.	P. 758257	13 May 1983
53.	P. 758258	13 May 1983

54.	P.	758259	13	May	1983
55.	P.	758260	13	May	1983
56.	P.	758261	13	May	1983
57.	P.	758262	13	May	1983
58.	P.	758263	13	May	1983
59.	P.	758264	13	May	1983
60.	P.	758265	13	May	1983
61.	P.	758266	13	May	1983
62.	P.	758267	13	May	1983
63.	P.	758268	13	May	1983
64.	P.	758269	13	May	1983
65.	P.	758270	13	May	1983
66.	P.	758271	13	May	1983
67.	P.	758272	13	May	1983
68.	P.	758273	13	May	1983
69.	P.	758274	13	May	1983
70.	P.	758275	13	May	1983
71.	P.	758276	13	May	1983
72.	P.	758402	17	May	1983
73.	P.	758403	17	May	1983
74.	P.	758404	17	May	1983
75.	P.	758405	17	May	1983
76.	P.	758406	17	May	1983
77.	P.	758407	17	May	1983
78.	P.	758408	17	May	1983
79.	P.	758409	17	May	1983
80.	P.	758410	17	May	1983
81.	P.	758411	17	May	1983
82.	P.	758412	17	May	1983
83.	P.	758413	17	May	1983
84.	P.	758414	17	May	1983
85.	P.	758415	17	May	1983
86.	P.	758416	17	May	1983
87.	P.	758417	17	May	1983
88.	P.	758418	17	May	1983
89.	P.	758419	17	May	1983
90.	P.	758420	17	May	1983
91.	P.	758421	17	May	1983
92.	P.	758422	17	May	1983
93.	P.	758423	17	May	1983
94.	P.	758424	17	May	1983
95.	P.	758425	17	May	1983
96.	P.	758426	17	May	1983
97.	P.	758427	17	May	1983
98.	P.	758428	17	May	1983
99.	P.	758429	17	May	1983
100.	P.	758430	17	May	1983
101.	P.	758431	17	May	1983
102.	P.	758432	17	May	1983
103.	P.	758433	17	May	1983
104.	P.	758434	17	May	1983
105.	P.	758435	17	May	1983
106.	P.	758436	17	May	1983
107.	P.	758437	17	May	1983
108.	P.	758438	17	May	1983
109.	P.	758439	17	May	1983
110.	P.	758440	17	May	1983
111.	P.	749821	14	September	1983
112.	P.	749822	14	September	1983
113.	P.	749823	14	September	1983

114.	P. 749824	14 September 1983
115.	P. 749825	14 September 1983
116.	P. 749826	14 September 1983
117.	P. 749827	14 September 1983
118.	P. 749828	14 September 1983
119.	P. 749829	14 September 1983
120.	P. 749830	14 September 1983
121.	P. 750016	14 September 1983
122.	P. 750017	14 September 1983
123.	P. 750018	14 September 1983
124.	P. 750019	14 September 1983
125.	P. 750020	14 September 1983
126.	P. 752187	14 September 1983
127.	P. 752188	14 September 1983
128.	P. 663467	26 November 1982
129.	P. 663468	26 November 1982
130.	P. 663469	26 November 1982
131.	P. 663470	26 November 1982
132.	P. 663471	26 November 1982
133.	P. 663472	26 November 1982
134.	P. 663473	26 November 1982
135.	P. 663474	26 November 1982

136.	P.	725197	28 June 1983
137.	P.	725198	28 June 1983
138.	P.	725199	28 June 1983
139.	P.	725200	28 June 1983
140.	P.	725202	28 June 1983
141.	P.	725203	28 June 1983
142.	P.	725204	28 June 1983
143.	P.	725205	28 June 1983
144.	P.	725206	28 June 1983
145.	P.	725207	28 June 1983
146.	P.	725208	28 June 1983
147.	P.	725209	28 June 1983
148.	P.	725210	28 June 1983
149.	P.	725211	28 June 1983
150.	P.	725212	28 June 1983
151.	P.	725213	28 June 1983
152.	P.	725214	28 June 1983
153.	P.	725215	28 June 1983
154.	P.	725216	28 June 1983
155.	P.	725217	28 June 1983
156.	P.	725218	28 June 1983
157.	P.	725219	28 June 1983
158.	P.	725220	28 June 1983
159.	P.	725221	28 June 1983
160.	P.	725232	28 June 1983
161.	P.	725233	28 June 1983
162.	P.	725234	28 June 1983
163.	P.	725235	28 June 1983
164.	P.	725236	28 June 1983
165.	P.	725237	28 June 1983
166.	P.	725238	28 June 1983
167.	P.	725239	28 June 1983
168.	P.	725240	28 June 1983
169.	P.	725241	28 June 1983
170.	P.	725242	28 June 1983
171.	P.	725243	28 June 1983
172.	P.	725244	28 June 1983
173.	P.	725245	28 June 1983
174.	P.	725246	28 June 1983
175.	P.	725247	28 June 1983
176.	P.	725248	28 June 1983
177.	P.	725249	28 June 1983
178.	P.	725250	28 June 1983
179.	P.	725251	28 June 1983
180.	P.	725252	28 June 1983
181.	P.	725253	28 June 1983
182.	P.	725254	28 June 1983
183.	P.	725255	28 June 1983
184.	P.	725256	28 June 1983
185.	P.	714952	17 May 1983
186.	P.	714956	28 June 1983
187.	P.	714957	28 June 1983
188.	P.	764414	17 May 1983
189.	P.	764415	17 May 1983
190.	P.	764416	17 May 1983
191.	P.	764417	17 May 1983
192.	P.	758817	17 May 1983
193.	P.	758818	17 May 1983
194.	P.	758819	17 May 1983
195.	P.	758820	17 May 1983
196.	P.	758821	17 May 1983

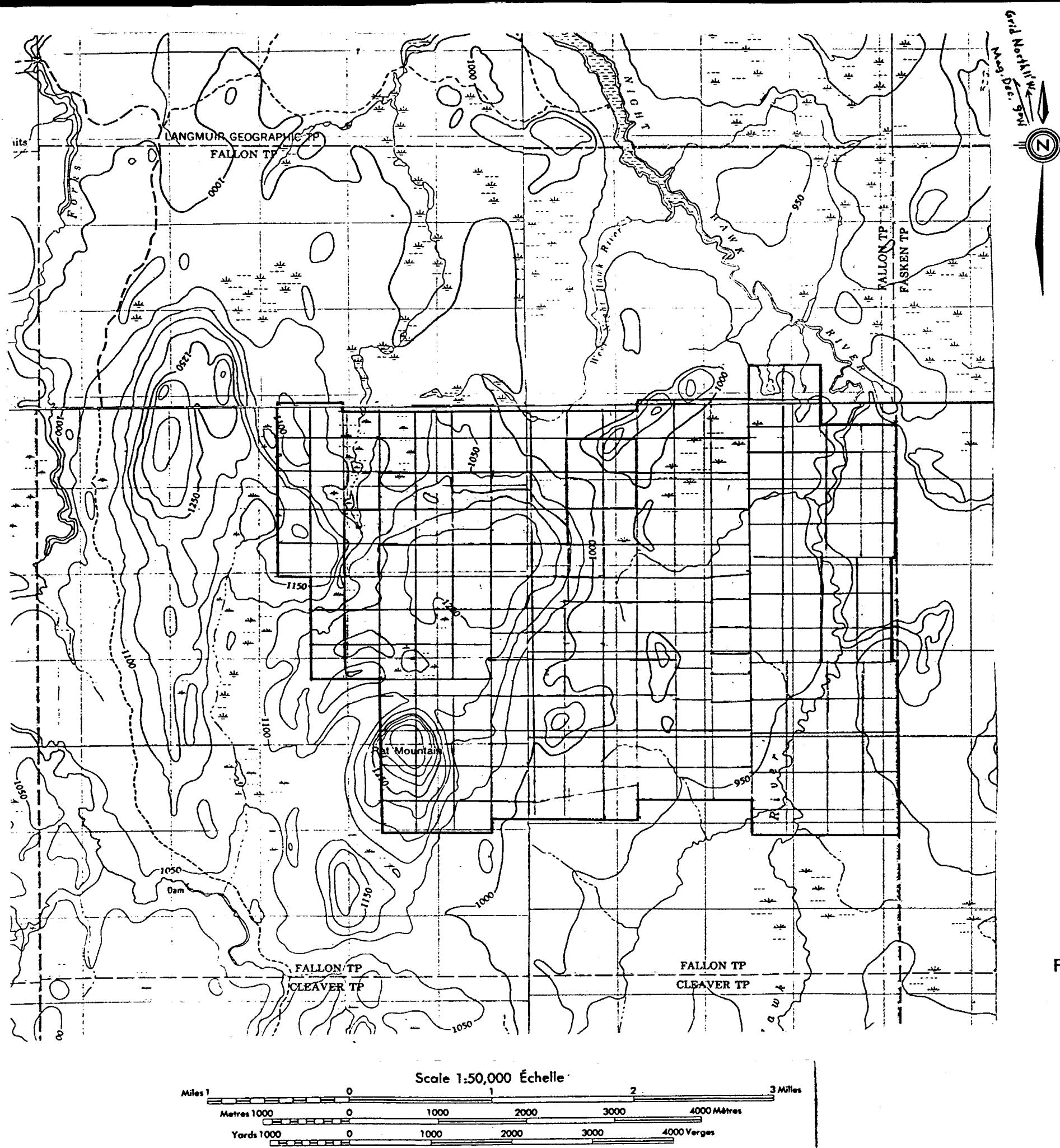
## ADDITIONAL MEUNIER CLAIMS IN FALLON TOWNSHIP

No.	Claim No.	Anniversary Date
197.	P. 803940	24 May 1984
198.	P. 803941	24 May 1984
199.	P. 803942	24 May 1984
200.	P. 803943	24 May 1984

## PHYSIOGRAPHY

Rat Mountain rises 1400 feet above sea level. This gives a maximum relief of 450 feet in the claim area. Generally speaking the relief does not exceed 10 to 70 feet throughout the area. Figure 3 is a topographic map of Fallon Township and the Meunier claim block.

Pleistocene and Recent alluvium mantle most of the area. Drainage is to the north with creeks and streams flowing north into the Night Hawk River which finds its way through Night Hawk and Frederick House Lakes into the Abitibi River and on to James Bay.



Meunier Claims covered in this report

Total extent of Meunier Claim Block

Figure 3 - Topographic map of Fallon Township

## NATURAL RESOURCES

At the present time timber operations are the only natural resource exploitation in this area. Most of the timber is spruce with some poplar also being harvested. Birch is cut for firewood by local residents. The swampy areas have alder and cedar trees growing on them, but, the alders are of no commercial value and the cedar is not being cut due to low demand for posts and logs.

## WILDLIFE

Bear and moose are the only big game, but, they are relatively plentiful judging by the number of hunters encountered and the sign observed while on traverse. Smaller game noted was beaver, otter, spruce grouse, rabbits and smaller fur-bearing animals such as muskrat, mink and weasel along the river. Numerous songbirds, blue heron and birds of prey were noted.

## ACKNOWLEDGEMENTS

Helpful discussions were had between the author and Mr. Meunier on the lay of the land, possible showings and interesting geology.

Linecutting was done by Gabriel Sutherland, Jim Townes, Paul Spence, O. Scott, Varley Sheppard-Blacksmith and Reg Neposh.

The author mapped most of the claims covered in this report and was assisted on several traverses by Mr. Meunier. Darwin Piroshoo mapped most of the claims in the southeast portion of the claim block.

The base map was prepared by tracing a 1/4 inch to 1 mile Data Series map with a 0000 pen and sending that tracing to Paragon Industrial Photographic Reproductions Ltd., 1160 Ellsmer Road, Scarborough, Ontario to be blown up to 1:5000 scale. The grid was located on 1/4 to 1 mile vertical airphotographs and transcribed to the enlarged map.

## PREVIOUS WORK

Burwash (1896) appears to have accompanied Niven's Ontario Land Survey when the western boundary of Fallon Township was surveyed. Goodwin (1911) mapped this line and his map makes reference to some sedimentary rocks and possibly some metavolcanics. Hopkins (1924) produced a map of a traverse across Fallon Township. Numerous other government authors have produced reports of surrounding townships.

The first government worker to detail map and report on Fallon Township specifically was Pyke (1972).

Numerous prospecting trenches are found throughout the area. Pyke (1972) describes some work on showings prior to 1968. The salena occurrence between mile posts 2 and 3 on the boundary of Fallon and Lansdowne Townships contains roughly 2% disseminated pyrite and 0.5% salena. Assays of 0.11 oz/ton Au and 3.21 oz/ton As were reported by Pyke (1972).

Previous assessment work in the area has been performed by a number of companies over the years since 1968 and is briefly described below.

INTERNATIONAL KENVILLE GOLD MINES LIMITED

International Kenville Gold Mines Limited conducted ground magnetometer and electromagnetic surveys over a 32 claim group in the northeastern part of Fallon Township in 1965. A follow-up diamond drill program of 5 holes to test one magnetic and one electromagnetic anomaly came up with minor pyrite and chalcopyrite with no notable assays.

MAGOMA MINES LIMITED

A 12 claim block in Lanesville (1 claim) and in the northwestern corner of Fallon Township was surveyed in 1965 using ground magnetometer and electromagnetic methods. This work did not produce any targets deemed worthy of testing.

MERCIER EXPLORATIONS INC.

This company staked 8 claims straddling the Fallon-Lansmuir Township boundary near the 2 mile post and conducted VLF electromagnetic and magnetic surveys over the property in 1983. No evidence of a follow-up program has been noted to date.

### MEUNIER CLAIMS - TECK OPTION

During 1980 and 1981 Teck Explorations Ltd. on behalf of Cominco Ltd., Hudson Bay Explorations and Development Ltd. and Lenx (Canada) Explorations Ltd. optioned claims from Mr. David Meunier covering the metasedimentary sequence south and west of the present claim block and a series of claims stretching to the south into Cleaver and Hinks Townships all over the metasedimentary sequence of Middle Precambrian Age. Mr. Meunier's option consisted of 250 claims and the operating party staked an additional 94 claims.

The purpose of this exploration program was to explore for paleoplacer gold.

The exploration program for 1980 consisted of:

1. Linecutting (39 km) east-west lines.
2. A refraction seismic orientation survey along the Fallon-Cleaver Township line.
3. A magnetometer survey along the east-west lines (29.55 km).
4. Geologic mapping at 1:10,000 scale with gammaray and scintillometer reconnaissance.
5. Three diamond drill holes totalling 6440 meters, all in Fallon Township.

The exploration program for 1981 consisted of:

1. Five diamond drill holes totalling 1,001 meters; Drill holes 4 and 4B were drilled in Cleaver Township, 7 in Hinks and 5 and 6 were drilled in Fallon Township. All holes were AQ size drilled vertically and assaying of the

Huronian section was by either neutron activation or DC plasma emission methods.

The results of this program failed to establish fluvi-al process deposition of the sedimentary rock sequence, hence paleoglacier solid deposits are not to be expected in this area, or in this rock sequence.

NORANDA EXPLORATION COMPANY LIMITED

Noranda controls four claims tied on the east end of the claims covered in this report. These claims cover the margin of the Fallon Stock, a porphyritic monzonite intruding mafic metavolcanic flows.

A grid was cut over the claims and a fluxgate magnetometer survey and a HLEM Max Min survey at 444 and 1777 Hz was conducted over the grid in 1982.

NORANDA EXPLORATION COMPANY LIMITED

Noranda held a group of 16 claims in Fallon Township contiguous with 10 claims in Cleaver Township with the easternmost claim at the 5 mile post on the boundary between the two townships.

Thirty four and one half miles of grid line was cut and a ground magnetometer and HLEM Max Min survey at frequencies of 444 and 1777 Hz was conducted over the grid in 1981.

NORANDA EXPLORATION COMPANY LIMITED

During 1981 Noranda cut 16.2 miles of grid over 19 contiguous claims in the northeastern portion of Fallon Township. A ground magnetometer and HLEM Max Min survey at frequencies of 444 and 1777 Hz was conducted over the grid.

### MEUNIER CLAIMS

A group of twelve (12) claims staked by Mr. Meunier in 1982 were the subject of an earlier geological report. This report was filed for assessment work credit in order to hold those claims which form part of the claim group which is the subject of this report.

The rocks were essentially a series of Archean mafic metavolcanic flows (Fe tholeiites and calco-alkalic) intruded by a porphyritic monzonite stock and dikes. These older rocks were cut by diabase dikes. This whole series of igneous rocks was overlain by Middle Precambrian (Huronian Supergroup) sedimentary mudstones, sandstones and conglomerates. No significant mineralization was encountered on these claims.

## GENERAL GEOLOGY

All underlying rock units that are covered by the Meunier claim block are of Archean age except the Cobalt metasedimentary units and a Middle Precambrian diabase dike.

The Archean rocks are a series of mafic to intermediate metavolcanic flows, either massive or pillowied, rarely pyroclastic. A series of intermediate to felsic metavolcanic rocks are sandwiched between the mafic flows. These may be altered and some are layered appearing to be waterlain tuffs. The flows dip steeply to the north with tops appearing in that direction as well. The metavolcanic flows are intruded by the porphyritic monzonite Fallon Stock. Several smaller bodies of similar mineralogy and appearance were noted while mapping. The larger stock appears to influence strike as well as producing a pronounced concentric foliation. Early Precambrian diabase dikes cut all the metavolcanic and intrusive rock units.

The Cobalt Group metasedimentary rocks unconformably overlie the Archean rocks.

A Middle Precambrian northeastern trending diabase dike apparently cuts all rock units. Mapping by Pyke (1973) found this age dike outside the present map area cutting the Cobalt Group rocks.

Figure 4 illustrates the general geology of Fallon and Fasken Townships.

Regional metamorphism is greenschist facies. The contact metamorphic aureole surrounding the Fallon Stock is

not as well pronounced as Pyke (1973) indicates, however,  
the effect is noted well away from the intrusive.

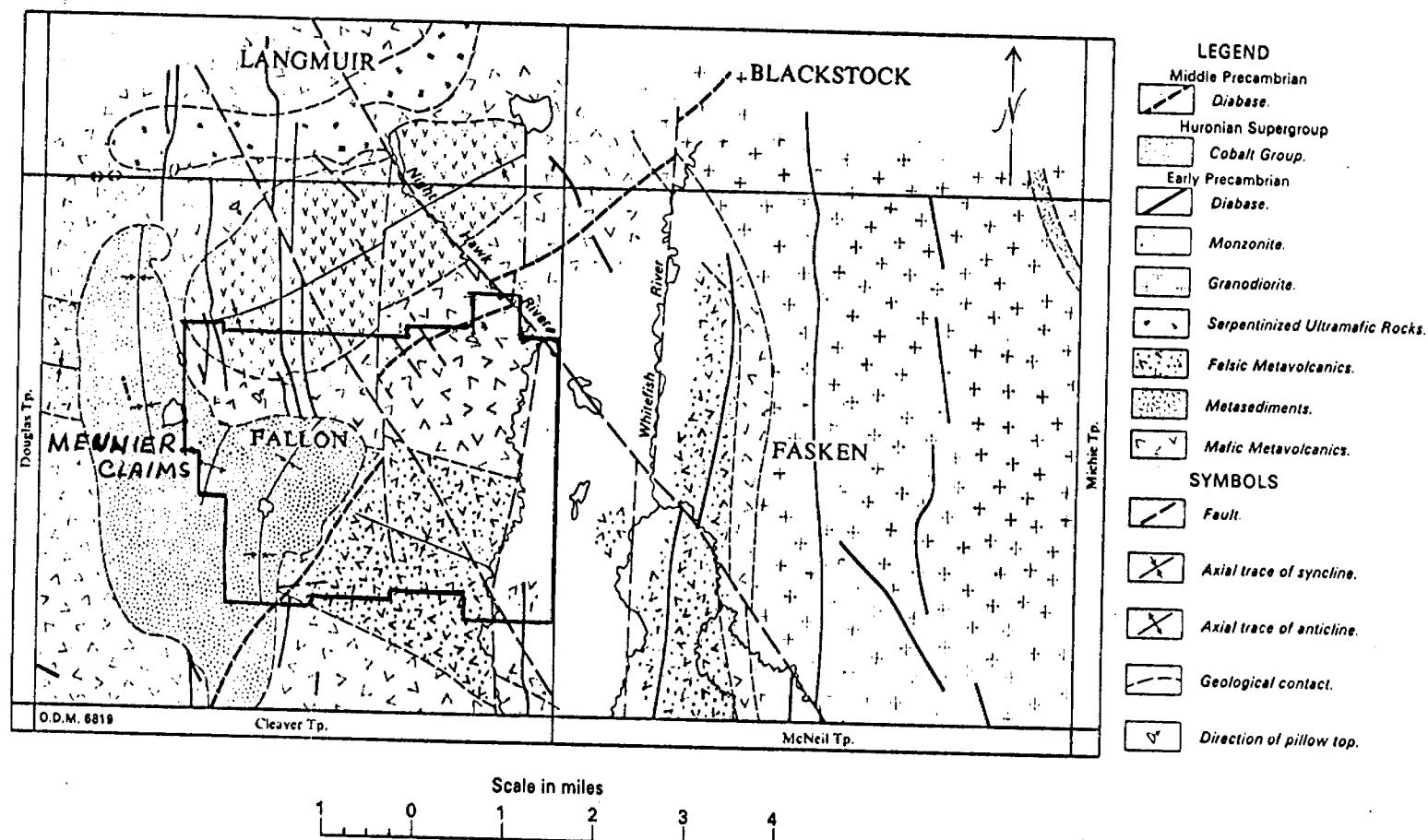


Figure 4-Sketch map illustrating the general geology of Fallon and Fasken Townships. After Pyke (1973)

EARLY PRECAMBRIAN (ARCHEAN)  
KOMATIITIC METAVOLCANIC ROCKS

While no komatiitic rocks were found in outcrop on this property there were numerous komatiitic boulders in several locations. It is quite likely these rocks were carried south by the glacier from where they outcrop along the north rim of the Fallon Stock, see the map by Pyke (1982). The boulders are generally dark blueish black on the fresh surface and turn moderate brown on weathering indicating carbonitization. They are heavy and often magnetic depending on the degree of alteration. Some boulders are greenish indicating fuchsite and contain up to 7-10% disseminated pyrite as < 1mm cubes.

The boulders tend to be concentrated around the base of the height of land caused by the Cobalt Group sedimentary rocks that overlie the Archean series of metavolcanics. The Cobalt Group were apparently more resistive and were not worn down by glacial action. Magnetic trends do not indicate the presence of komatiitic rocks under drift covered areas on this property.

TABLE 1

Table of Lithologic Units

CENOZOIC

QUATERNARY

Recent

Swamp and stream deposits

Pleistocene

Till, clay, sand and gravel

Unconformity

PRECAMBRIAN

MIDDLE PRECAMBRIAN

HURONIAN SUPERGROUP

Cobalt Group

Gowenda Formation

Mudstone, sandstone and conglomerate

Unconformity

EARLY PRECAMBRIAN (ARCHEAN)

MAFIC INTRUSIVE ROCKS

Dikes

Intrusive Contact

FELSIC INTRUSIVE ROCKS

Porphyritic monzonite

Intrusive Contact

METAVOLCANIC AND METASEDIMENTARY ROCKS

CHEMICAL AND CLASTIC METASEDIMENTARY ROCKS

None found

FELSIC METAVOLCANIC ROCKS

Sodic rhyolite, dacite, tuffaceous and massive

INTERMEDIATE METAVOLCANIC ROCKS

Dacite, andesite and calc-alkaline basalt

MAFIC METAVOLCANIC ROCKS

Massive and pillowied iron tholeiitic lava, and  
percolastic rocks

KOMATIITIC METAVOLCANIC ROCKS

None found

#### MAFIC METAVOLCANIC ROCKS

Only a few boulders of pillowed magnesium tholeiitic basalt have been noted.

Iron tholeiitic basalts appear to be the dominate rock type underlying the claim group. These rocks are aphanitic, dark greenish black with 1 to 3% pyrite and magnetite and they weather greenish gray. They may be massive or pillowed. Some portions are porphyritic with phenocrysts of plagioclase to 1 mm. This could be caused by thicker flows taking longer to cool after extrusion. The pillowed units commonly have pillows 30 to 50 cm in elongate section and 10 to 20 cm in vertical section. Gas vesicles are not uncommon with amygdules rare. Selvages are rusty brown and 1 to 2 cm wide.

Pyroclastic and tuffaceous units are rare. The pyroclastics are lapilli to breccia in size and are likely flow top breccias rather explosion breccias or hyaloclastites.

Where the metavolcanics are proximal to the Fallon Stock, epidote and K-feldspar alteration is common. This alteration may lead to confusion between tholeiitic and calc-alkalic basalts unless careful observations and/or chemical analyses are made. Some of the alteration gives a layered appearance with orangish gray zones interbedded with the darker green zones. This feature establishes the zone of contact metamorphism.

Relationships between the massive, pillowed and pyroclastic units could not be determined.

#### INTERMEDIATE METAVOLCANIC ROCKS

Intermediate metavolcanic rocks are dacite to andesite in composition and are light grey, massive, finely crystalline with sparse plagioclase phenocrysts 1 to 2 mm in size.

Some pyroclastic breccias were noted on the south-central claims. They weather grey and contain 5 to 50% extremely stretched and chloritized fragments and locally contain plagioclase phenocrysts up to 20%. Stretching may occur up to a ratio of 20 to 1 and the long direction is parallel to the foliation, usually about 120°.

Some carbonate alteration is present locally as is K-feldspar alteration.

## FELSIC METAVOLCANIC ROCKS

Felsic units are not well exposed. Most are narrow and could be interpreted as dikes. They are siliceous and very hard. They are not as grey as the intermediate rocks and are more buff in color. They are usually tuffaceous to pyroclastic and are not noted as massive flows.

Foliation is quite pronounced perhaps because of their brittle nature.

Pyke (1973) describes some units have a high soda to potash ratio in conjunction to a high silica content as being a soda rhyolite. No whole rock analyses were made in this survey to prove or disprove this contention. The rock unit located where Pyke (1973) described it (northeast Fallon near the diabase dike) is orange in color and weathers a light orange. It is very hard indicating a high silica content. Also near the large dike just mentioned interlayering of mafic and felsic units is well developed. The contacts do not appear to be mineralized. The VLF EM conductors near the location concerned are short and do not appear to be related to contacts between differing rock types.

#### METASEDIMENTARY ROCKS

No thick sequence of clastic or chemical metasedimentary rocks of Archean Age were encountered on the claim group. Some interflow sedimentary units or well layered waterlain tuffs were noted in the southwestern portion of the property. These were classified as volcaniclastic because of small plagioclase phenocrysts and chloritic bands.

Some conductors were noted during a VLF EM survey and they could be caused by graphitic interflow units not exposed in outcrop or buried mineralized flow tops. Stripping these areas or drilling them could explain the anomalies and determine the true nature of these units.

## FELSIC INTRUSIVE ROCKS

The main felsic intrusive rocks on the Meunier claims are porphyritic monzonite related to the Fallon Stock. There are some syenitic phases, however, these are minor. Aside from the main stock there are several small plugs and numerous dikes of similar composition. Some granodioritic dikes were also noted and the author is unsure how or if they are related to the monzonitic portions.

The porphyry is a medium to coarse grained rock composed of light pink to greenish white plagioclase phenocrysts 3 to 5 mm in length which make up 10 to 20% of the rock. Potassic feldspar is usually <1 mm and comprises 20% of the rock. Fine grained plagioclase accounts for another 20% and mafic minerals, hornblende, opaques and accessories comprise the final 15 to 20% of the rock. This observation is based on thin section studies by the author and corroborates Pyke's (1973) findings. The color is light pinkish orange weathering to grayish orange.

Dikes are from 1 to 5 meters wide and show sharp contacts with the volcanic rocks and may have thin chill margins up to 5 cm wide.

## MAFIC INTRUSIVE ROCKS

The only mafic intrusive rocks are the early north and Middle Precambrian northeast trending diabase dikes transecting the claim group. They are medium to coarse grained, dark greyish black and weather to moderate brown. Only the Middle Precambrian northeast trending dikes are known to cut the Cobalt Group. This type of diabase on fresh surface is dark grey along chilled margins and light grey often with a pinkish cast in coarser grained portions. The rock weathers to dark orangish brown.

The older north and northwest trending diabase dikes are dark greyish black on fresh surfaces weathering to dark grey to orangish brown. Some are porphyritic with saussuritized plagioclase crystals between 0.5 to 4 cm in length. The larger phenocrysts may comprise 15 to 20% of the rock in observed showings. Pyke (1973) reports up to 40% with a total plagioclase content of 51.7% calcic andesine.

MIDDLE PRECAMBRIAN

HURONIAN SUPERGROUP

COBALT GROUP

GOWGANDA FORMATION

This formation is a series of relatively flat-lying mudstones, sandstones and conglomerates unconformably overlying the Archean metavolcanic and intrusive rocks.

The mudstones are argillaceous, fissile, dark grey and weather buff. The sandstones are arkose and greywacke and are grey weathering orange to greyish red. Some graded bedding is noted. Conglomerate (boulder and pebble) appear to be interformational and granitic clasts up to 40% are noted along with mafic 20% and felsic 10% metavolcanics and older sedimentary rocks 10%. The matrix is greywacke and comprises about 20% of the rock. The conglomerate is generally clast supported.

CENOZOIC

QUATERNARY

PLEISTOCENE AND RECENT

Generally speaking a good deal of the northern part of the claim block is covered by muskeg swamp. Muskeg is 1 to 1.5 meters thick covering varved clay to bedrock. Some glacial till may cover the bedrock. The higher ground is covered by sand and gravel deposits with minor varved clay. Any till will be just above bedrock. Thickness of overburden ranges from 5 to 50 meters. Overburden tends to slope gently to the south from some of the more prominent topographical features (crag-and-tail).

## METAMORPHISM

Metamorphic grade is greenschist facies with some rocks being metamorphosed to lower amphibolite facies. Carbonate and epidote alteration is common with potassic alteration less common. Quartz veining is common although associated sulfide mineralization is usually lacking. Pyke (1982) defined a contact metamorphic aureole around the Fallon Stock. There is evidence of alteration in that more epidote, carbonate and potassic alteration is noted nearer the stock, however, the line of influence is largely subjective.

## STRUCTURAL GEOLOGY

### FOLDS

Pillow tops are indistinct, but, at least one was reliable enough to indicate tops face north.

Studying the regional geology indicates that the Fallon Stock intruded along the trough of a syncline.

### FAULTS

While there are indications of minor displacement of the metavolcanics and the Fallon Stock from shearing and on the regional map, little field evidence for faulting is available apart from shearing and quartz veining. Topographical features seem to be the best indicator of displacement. Diabase dikes could have intruded along faults or other zones of weakness.

The larger streams and rivers likely flow along faults.

## STRATIGRAPHY

Pyke (1978) and (1982) established the stratigraphic relationships for the Timmins Area. These same criteria may be applied to this area.

The metavolcanic rocks underlying the claim group appear to be of the Middle to Upper Metavolcanic Formations of the Tisdale Group. These are characterized by iron tholeiites overlain by calc-alkaline pyroclastic rocks.

Komatiitic rocks are rare, but, they are known to occur in these units. Figure 5 shows the regional stratigraphic relationships.

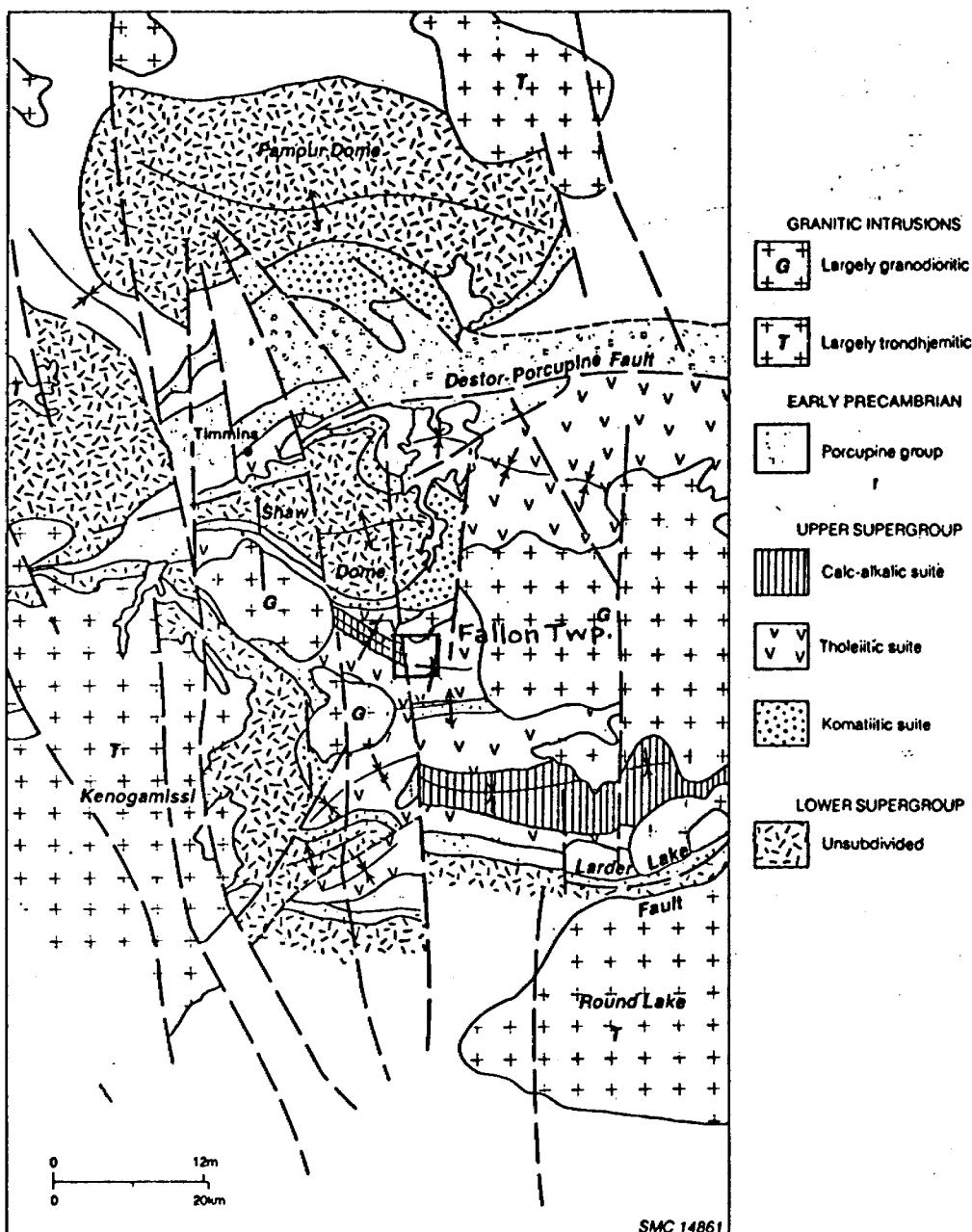


Figure 5 -Regional stratigraphy of the Timmins-Matachewan area.  
Pyke (1982)

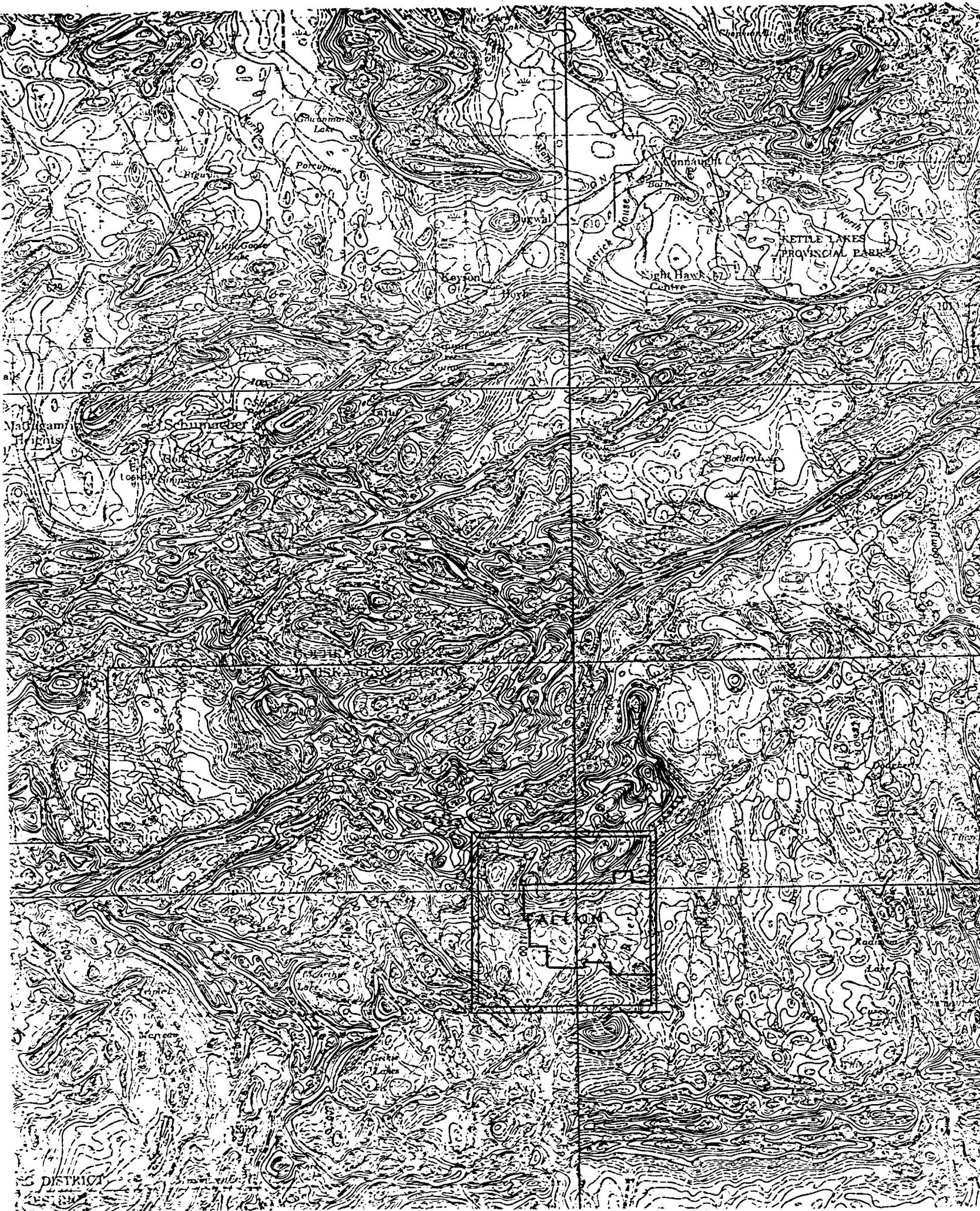
## GEOPHYSICS

Figure 6 is a map of the regional aeromagnetics. The Fallon Stock appears as magnetic high indicating concentrations of magnetic minerals. The metavolcanic sequence has a lower magnetic response and the low magnetic response of the Cobalt Group further masks any magnetic response the metavolcanic units may create. Even the north trending diabase dikes are difficult to follow.

Figure 7 is a Bouguer Gravity map of the region and shows Fallon Township on the edge of a gravity low caused by the Shaw Dome to the north and a gravity high caused by komatiitic and iron tholeiitic rocks to the south.

Further detailed ground magnetic and electromagnetic surveys have been conducted over the property to further sort out stratigraphic units. These surveys were of some help, most notably in tracing the limit of the Fallon Stock (magnetics) and where mineralized flow tops (VLF EM) were possibly present. These surveys were filed for assessment.

A preliminary airborne magnetic, electromagnetic and resistivity Digem II survey was conducted over the property and help sort out gross units and structures. This survey was filed for assessment work credit.



Mag. Dec.  
9° W



Meunier Claims

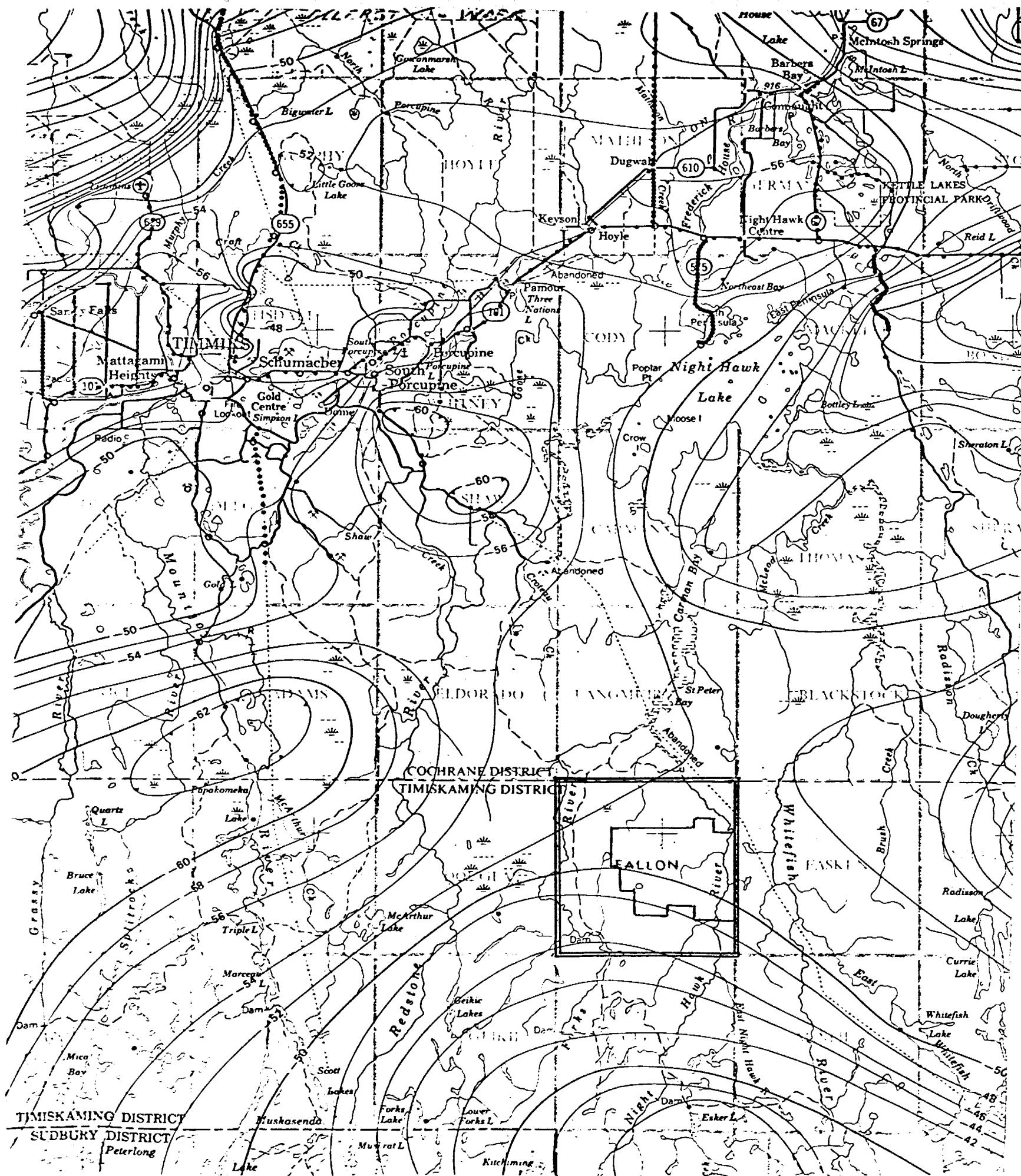
-44-

Figure 6  
MAP 7085 G

**TIMMINS**  
COCHRANE TIMISKAMING & SUDBURY DISTRICTS  
ONTARIO

Scale: One Inch to Four Miles =  $\frac{1}{253,440}$   
Miles

4 2 0 4 8 12



## ECONOMIC GEOLOGY

This area is part of an area that has received scant attention in the past for either gold or base metals.

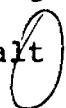
Sulfides have not been discovered in abundance to date, however, the masking effect of the overburden does present a problem. The presence of the Fallon Stock could be a source of mineralizing solutions, hence, looking for structural and/or stratigraphic traps for mineralization would be a logical approach.

This survey has not found any fine grained sedimentary or exhalative units that may have acted as traps for mineralizing solutions.

Most quartz veins have been small and have not returned significant assays. Thick clay sequences would prevent effective use of geochemical techniques as an exploration tool. Overburden drilling might be considered as a support tool to stripping.

## CONCLUSIONS AND RECOMMENDATIONS

Some induced polarization lines where depth of overburden is not too great over conductors would help pin down some targets if disseminated sulfides are present in quantity. Further IP work around the contact of the Fallon Stock and east as west of the large diabase dike in the northeast sector of the claim block could provide some interesting targets. Further overburden stripping both south and north of Base Line No. 1 around the porphyry plugs and shear zones would be a relatively inexpensive way of gaining further information prior to diamond drilling. The conductor east of the Cobalt Group sedimentary sequence could be drilled if stripping is not feasible. Sampling of the old pits and showings have not returned any significant assays to date.

Overburden drilling might be used where drift cover is deep as a method of tracing possible gold mineralization providing good basalt  till sheets are present.

Lithogeochemistry would aid in sorting out stratigraphic units and alteration zones. Bedrock samples obtained from overburden drilling could be analysed providing assistance in the interpretation of drift covered areas.

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## SYMBOLS

	Esker.		Drill hole; (vertical, inclined).
	Outwash fan.		Drill hole; (projected vertically, projected up dip). Overburden shown.
	Sand or gravel feature. Label the specific feature. Use to delineate eskers at large scales.		Drill hole; (projected vertically, projected up dip). Overburden shown.
	Raised or ancient shoreline. Shown in colour mostly on Pleistocene series.		Shaft; depth in feet.
	Small bedrock outcrop.		Test pit.
	Area of bedrock outcrop.		Exploration trenching.
	Bedding, horizontal.		Adit.
	Bedding, top unknown; (inclined, vertical).		Quarry.
	Bedding, top indicated by arrow; (inclined, vertical, overturned).		Gravel pit.
	Bedding, top (arrow) from grain gradation; (inclined, vertical, overturned).		Open cut, quarry etc. Label precisely.
	Bedding, top (arrow) from cross bedding; (inclined, vertical, overturned).		Mine dump. Label.
	Bedding, top (arrow) from relationship of cleavage and bedding; (inclined overturned).		Hummocky topography.
	Lava flow; top (arrow) from pillows shape and packing.		Swamp.
	Schistosity; (horizontal, inclined, vertical).		Motor road.
	Foliation; (horizontal, inclined, vertical).		Other road.
	Gneissosity; (horizontal, inclined, vertical).		Trail, portage, winter road.
	Banding; (horizontal, inclined, vertical).		
	Jointing; (horizontal, inclined, vertical).		
	Lineation with plunge.		
	Geological boundary, observed.		
	Geological boundary, position interpreted.		
	Geological boundary, deduced from geophysics.		
	Lineament or fault.		
	Fault; (observed, assumed). Spot indicates down throw side, arrows indicate horizontal movement.		
	Name major shear zones. If absolutely no room, abbreviate shear to s.z. and explain in symbol list, but try to avoid.		
	Drag folds with plunge.		
	Anticline, syncline, with plunge.		
	Glacial striae.		

## LEGEND

CENOZOIC  
QUATERNARY

Pleistocene, Recent  
Clay, sand, gravel, till

*Unconformity*

PRECAMBRIAN

MIDDLE PRECAMBRIAN

Mafic Intrusive Rocks

**7**

7a Diabase

*Intrusive Contact*

Huronian Supergroup

Cobalt Group

Gowganda Formation

**6**

6a Mudstone, argillite

6b Sandstone, arkose, wacke

6c Conglomerate

*Unconformity*

EARLY PRECAMBRIAN

Mafic Intrusive Rocks

**5**

5a Diabase

*Intrusive Contact*

Felsic Intrusive Rocks

**4**

4a Porphyritic monzonite

4b Granodiorite

*Intrusive Contact*

Felsic Metavolcanic Rocks

**3**

3a Very fine - nonporphyritic tuffs and flows

Intermediate Metavolcanic Rocks

**2**

2a Massive flows - Tholiitic andesite - Calc-alkalic basalt

2b Plagioclase porphyritic

2c Pyroclastic breccia - porphyritic

2d Pyroclastic breccia - nonporphyritic

2e K-feldspar porphyritic

Mafic Metavolcanic Rocks

**1**

1a Massive iron tholiitic basalt

1b Pillowed iron tholiitic basalt

1c Brecciated basalt

1d Porphyritic basalt

1e Massive coarse grained basalt (gabbro)

MELUNIER CLAIMS IN FALLON TOWNSHIP

No.	Claim No.	Anniversary Date
1.	R. 653259	12 September 1982
2.	R. 653260	12 September 1982
3.	R. 653261	12 September 1982
4.	R. 653262	12 September 1982
5.	R. 641742	27 September 1982
6.	R. 641743	27 September 1982
7.	R. 653988	27 September 1982
8.	R. 653989	27 September 1982
9.	R. 641738	28 September 1982
10.	R. 641731	28 September 1982
11.	R. 641732	28 September 1982
12.	R. 641733	28 September 1982
13.	R. 641734	28 September 1982
14.	R. 654196	28 September 1982
15.	R. 654191	28 September 1982
16.	R. 654192	28 September 1982
17.	R. 654193	28 September 1982
18.	R. 654194	28 September 1982
19.	R. 654195	28 September 1982
20.	R. 654196	28 September 1982
21.	R. 654197	28 September 1982
22.	R. 654198	28 September 1982
23.	R. 663909	25 October 1982
24.	R. 663910	25 October 1982
25.	R. 663911	25 October 1982
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33.	R. 663955	25 October 1982
34.	R. 663955	25 October 1982
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45.	R. 663956	26 November 1982
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47.	R. 663958	26 November 1982
48.	R. 663959	26 November 1982
49.	R. 663960	26 November 1982
50.	R. 663961	26 November 1982
51.	R. 663962	26 November 1982
52.	R. 759257	13 May 1983
53.	R. 759258	13 May 1983

Filed under a  
previous survey

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135.	P.	663474	26	November	1982



Ministry of  
Natural  
Resources  
Ontario

**Report of Work**  
(Geophysical, Geological,  
Geochemical and Expenditures)

# 3

21

The Minn



42A02NW0030 2.7404 FALCON

MNR

900

Type of Survey(s)

Linecutting - Geological

Claim Holder(s)

David Meunier

Address

403 Dome, SOUTH PORCUPINE, Ontario. PON 1K0

Survey Company

R.P. Bowen

Name and Address of Author (of Geo-Technical report)

R.P. Bowen, P.O. Box 5010 PMS, SOUTH PORCUPINE, Ontario PON 1K0

Township or Area

Fallon

Prospector's Licence No.

M-17157

Credits Requested per Each Claim in Columns at right

Special Provisions		Geophysical	Days per Claim
For first survey:	Enter 40 days. (This includes line cutting)	- Electromagnetic	
		- Magnetometer	
		- Radiometric	
		- Other	
	For each additional survey: using the same grid: Enter 20 days (for each)	Geological	40
		Geochemical	
Mar. Days	Complete reverse side and enter total(s) here	Geophysical	Days per Claim
		- Electromagnetic	
		- Magnetometer	
		- Radiometric	
		- Other	
		Geological	
		Geochemical	
Airborne Credits		Electromagnetic	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.		Magnetometer	
		Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on	Claim #	PORCUPINE MINING DIVISION
<b>RECEIVED</b>		
SEP 11 1984		
Calculation of Expenditure Days Credits		Total P.M. Days Credits
Total Expenses	\$ 71891011121123456	

## 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.

Date	SEP 1984	Recorder/Holder or Agent (Signature)
<i>R.P. Bowen</i>		

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 without aid, counsel and direction, except as and to the extent indicated above.

Name and Factual Address of Person Certified

R.P. Bowen

P.O. Box 5010 PMS, SOUTH PORCUPINE, Ont PON1K0

## For Office Use Only

Total Days Cr. Recorded	Date Recorded	Miner Recorder
1360	Sept 11 1984	<i>John C. Wilcock</i>
	Date Approved as Recorded	Branch Director MDC
	See Reuseed Statement	

184

Total number of mining claims covered by this report of work.

Mining Lands Section

File No 27404

Control Sheet

TYPE OF SURVEY       GEOPHYSICAL  
 GEOLOGICAL  
 GEOCHEMICAL  
 EXPENDITURE

MINING LANDS COMMENTS:

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*HP* *Top* *b.d.*

*RECEIVED*  
*MAY 01 1985*  
*MINING LANDS SECTION*

*J. Hunt*

Signature of Assessor

*86-10-16*

Date



Ministry of  
Natural  
Resources

**Technical Assessment  
Work Credits**

File

2.7404

Date

1984 11 26

Mining Recorder's Report of  
Work No. 371/84

Recorded Holder

DAVID MEUNIER

Township or Area

FALLON TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b>	
Electromagnetic _____ days	P 653259 to 262 inclusive 641742-43 653909
Magnetometer _____ days	641730 to 734 inclusive 661936
Radiometric _____ days	654192 to 195 inclusive 654197-98
Induced polarization _____ days	663907 to 916 inclusive 683356 to 362 inclusive 758258 to 276 inclusive 758402 to 409 inclusive
Other _____ " days	758411-12 758415 to 421 inclusive 758425-30-31-34-35-38 749822-23
<b>Section 77 (19) See "Mining Claims Assessed" column</b>	
<b>Geological</b> _____ 40 days	725236 to 239 inclusive 725242-43 725245 to 256 inclusive 764414-17 758817-18-19-20
<b>Geochemical</b> _____ days	749825 to 830 inclusive 750016 to 020 inclusive 752187-88 663467-68-69-70-74
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input checked="" type="checkbox"/> Ground <input type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

## Special credits under section 77 (16) for the following mining claims

## 15 DAYS

P 758428  
725240-41  
758821

## 10 DAYS

P 653908  
654191-96  
758257  
758422-23-24-26-27  
749821  
725215-16-17-35  
749824

## 5 DAYS

P 758410-14-40  
725214-19-20-21-34-44  
714956

## No credits have been allowed for the following mining claims

 not sufficiently covered by the survey Insufficient technical data filed

P 758413  
758429-32-33-36-37-39  
725197 to 200 inclusive  
725202 to 213 inclusive  
725218-32-33  
714952-57  
764415-16  
663471-72-73

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19) — 60;

1984 12 20

Your File: 371/84  
Our File: 2.7404

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
T1mmins, Ontario  
P4N 2S7

Dear Sir:

RE: Notice of Intent dated November 26, 1984.  
Geological Survey on Mining Claims P 641730  
et al in the Fallon Township.

---

The assessment work credits, as listed with the  
above-mentioned Notice of Intent, have been approved  
as of the above date.

Please inform the recorded holder of these mining  
claims and so indicate on your records.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone:(416)965-6918

S. Hurst:sc

cc: David Meunier  
403 Dome  
South Porcupine, Ontario  
PON 1K0

cc: Mr. G.H. Ferguson  
Mining & Lands Commissioner  
Toronto, Ontario

cc: Resident Geologist  
Timmins, Ontario



Ministry of  
Natural  
Resources

Dec 11/84

1984 11 26

Your File: 371/84  
Our File: 2.7404

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact  
Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

A handwritten signature in black ink, appearing to read "S.E. Yundt".

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3

R2 S. Hurst:mc  
Encls.

cc: David Meunier  
403 Dome  
South Porcupine, Ontario  
PON 1K0

cc: Mr. G.H. Ferguson  
Mining & Lands Commissioner  
Toronto, Ontario



Ministry of  
Natural  
Resources

Notice of Intent  
for Technical Reports

1984 11 26

2.7404/371/84

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.



Ministry of  
Natural  
Resources

**Report of Work**  
(Geophysical, Geological,  
Geochemical and Expenditures)

2.7404  
2.7492  
#120/85

**Mining Act**

Your Ref ID: 2-1395  
2.7404

- Instructions:** - Please type or 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 areas below.

Type of Survey(s) <b>Geological &amp; Geophysical</b>	Township or Area <b>Fallon, Twp.</b>
Claim Holder(s) <b>David J. Meunier - Gabriel Sutherland</b>	Prospector's Licence No. <b>M-17157 ✓</b>
Address <b>403 Dome St., South Porcupine, ON PON 1H0</b>	
Survey Company <b>R.P. Bowen</b>	Date of Survey (from & to) <b>01 05 84 01 09 84</b>
	Total Miles of line Cut <b>4</b>
Name and Address of Author (of Geo-Technical report) <b>R.P. Bowen, P.O. Box 5010, PMS, South Porcupine, ON PON 1K0</b>	

Credits Requested per Each Claim in Columns at right

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

Man Days	Geophysical	Days per Claim
Complete reverse side and reverse total(s) here APPCUPINE MINING DIVISION	Electromagnetic	
<b>RECEIVE</b>	Magnetometer	
APR 02 1985	Radiometric	
A.M. 7, 8, 9, 10, 11, 12, 1, 2, 3	Other	
P.M. 7, 8, 9, 10, 11, 12, 1, 2, 3	Geological	
	Geochemical	

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

Expenditures (excludes power stripping)

Type of Work Performed		
Performed on Claim(s)		
Calculation of Expenditure Days Credits		
Total Expenditures		Total Days Credits
\$	÷ 15 =	
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.		

Date  
**-1 APR 1985**

Recorded Holder or Agent (Signature)  
*R.P. Bowen*

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

**R.P. Bowen**

P.O. Box 5010, PMS, South Porcupine, ON	Date Certified <b>-1 APR 1985</b>	Certified by (Signature) <i>R.P. Bowen</i>
---	--------------------------------------	---

For Office Use Only  
Total Days Cr. Date Recorded  
Recorded  
**320 Apr 21 85**  
Date Approved as Recorded  
**Apr 21 85**  
Director  
*Stanley*



# 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.**

Type of Survey(s) Linecutting - Geological

Township or Area Fallon Township

Claim Holder(s) David Meunier

Survey Company R.P. Bowen

Author of Report R.P. Bowen

Address of Author P.O. Box 5010 PMS, S. PORCUPINE

Covering Dates of Survey May 1983 - July 1984  
(linecutting to office)

Total Miles of Line Cut 109.37

**SPECIAL PROVISIONS**  
**CREDITS REQUESTED**

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
-Electromagnetic	
-Magnetometer	
-Radiometric	
-Other	
Geological	40
Geochemical	

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

Magnetometer Electromagnetic Radiometric  
(enter days per claim)

DATE: SEP 1984 SIGNATURE: R.P. Bowen  
Author of Report or Agent

Res. Geol. ..... Qualifications 28257

Previous Surveys

File No.	Type	Date	Claim Holder
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

**MINING CLAIMS TRAVERSED**  
List numerically

P. ....	653259
(prefix) .....	(number)
.....	653260
.....	653261
.....	653262
.....	641742
.....	641743
.....	653908
.....	653909
.....	641730
.....	641731
.....	641732
.....	641733
.....	641734
.....	661936
.....	654191
.....	654192
.....	654193
.....	654194
.....	654195
.....	654196
.....	654197
.....	654198
<b>TOTAL CLAIMS</b> _____	

If space insufficient, attach list

# GEOPHYSICAL TECHNICAL DATA

**GROUND SURVEYS** — If more than one survey, specify data for each type of survey

Number of Stations \_\_\_\_\_ Number of Readings \_\_\_\_\_  
Station interval \_\_\_\_\_ Line spacing \_\_\_\_\_  
Profile scale \_\_\_\_\_  
Contour interval \_\_\_\_\_

MAGNETIC

Instrument \_\_\_\_\_  
Accuracy – Scale constant \_\_\_\_\_  
Diurnal correction method \_\_\_\_\_  
Base Station check-in interval (hours) \_\_\_\_\_  
Base Station location and value \_\_\_\_\_  
\_\_\_\_\_

ELECTROMAGNETIC

Instrument \_\_\_\_\_  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:                    Fixed transmitter            Shoot back            In line            Parallel line  
Frequency \_\_\_\_\_  
(specify V.L.F. station)  
Parameters measured \_\_\_\_\_

GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
\_\_\_\_\_  
Base station value and location \_\_\_\_\_  
\_\_\_\_\_

INDUCED POLARIZATION

RESISTIVITY

Instrument \_\_\_\_\_  
**Method**    Time Domain                    Frequency Domain  
Parameters -- On time \_\_\_\_\_                   Frequency \_\_\_\_\_  
              -- Off time \_\_\_\_\_                   Range \_\_\_\_\_  
              -- Delay time \_\_\_\_\_  
              -- Integration time \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

**MINING CLAIMS TRAVERSED**  
List numerically

P.	663009
(prefix)	(number)
	<del>663010</del>
	<del>663011</del>
	<del>663012</del>
	<del>663013</del>
	<del>663014</del>
	<del>663015</del>
	<del>663016</del>
	<del>663017</del>
	<del>663018</del>
	<del>683255</del>
	<del>663205</del>
	663907
	663908
	663909
	663910
	663911
	663912
	663913
	663914
	663915
	663916

TOTAL CLAIMS \_\_\_\_\_

**MINING CLAIMS TRAVERSED**  
List numerically

P.	683356
(prefix)	(number)
	683357
	683358
	683359
	683360
	683361
	683362
	758257
	758258
	758259
	758260
	758261
	758262
	758263
	758264
	758265
	758266
	758267
	758268
	758269
	758270
	758271

TOTAL CLAIMS \_\_\_\_\_

**MINING CLAIMS TRAVERSED**  
List numerically

P. 758272  
(prefix) (number)

758273.....

758274.....

758275.....

758276.....

758402.....

758403.....

758404.....

758405.....

758406.....

758407.....

758408.....

758409.....

758410.....

758411.....

758412.....

758413.....

758414.....

758415.....

758416.....

758417.....

758418.....

TOTAL CLAIMS.....

**MINING CLAIMS TRAVERSED**  
List numerically

P. 758419.....

(prefix) (number)

758420.....

758421.....

758422.....

758423.....

758424.....

758425.....

758426.....

758427.....

758428.....

758429.....

758430.....

758431.....

758432.....

758433.....

758434.....

758435.....

758436.....

758437.....

758438.....

758439.....

758440.....

TOTAL CLAIMS.....

If space insufficient, attach list

**MINING CLAIMS TRAVERSED**  
List numerically

P..... 749821.....  
(prefix) (number)

749822.....

749823.....

749824.....

749825.....

749826.....

749827.....

749828.....

749829.....

749830.....

750016.....

750017.....

750018.....

750019.....

750020.....

752187.....

752188.....

663467.....

663468.....

663469.....

663470.....

663471.....

**TOTAL CLAIMS**.....

**MINING CLAIMS TRAVERSED**  
List numerically

P..... 663472.....  
(prefix) (number)

663473.....

663474.....

725197.....

725198.....

725199.....

725200.....

725202.....

725203.....

725204.....

725205.....

725206.....

725207.....

725208.....

725209.....

725210.....

725211.....

725212.....

725213.....

725214.....

725215.....

725216.....

**TOTAL CLAIMS**.....

If space insufficient, attach list

**MINING CLAIMS TRAVERSED**  
List numerically

P.....	725217.....
(prefix)	(number)
	725218.....
	725219.....
	725220.....
	725221.....
	725232.....
	725233.....
	725234.....
	725235.....
	725236.....
	725237.....
	725238.....
	725239.....
	725240.....
	725241.....
	725242.....
	725243.....
	725244.....
	725245.....
	725246.....
	725247.....
	725248.....

**TOTAL CLAIMS** \_\_\_\_\_

**MINING CLAIMS TRAVERSED**  
List numerically

P.....	725249.....
(prefix)	(number)
	725250.....
	725251.....
	725252.....
	725253.....
	725254.....
	725255.....
	725256.....
	714952.....
	714956.....
	714957.....
	764414.....
	764415.....
	764416.....
	764417.....
	758817.....
	758818.....
	758819.....
	758820.....
	758821.....
	803940.....
	803941.....

**TOTAL CLAIMS** \_\_\_\_\_

If space insufficient, attach list

**MINING CLAIMS TRAVERSED**  
List numerically

P. 803942

(prefix) 803943 (number)

TOTAL CLAIMS 184

**MINING CLAIMS TRAVERSED**  
List numerically

(prefix) (number)

If space insufficient, attach list

TOTAL CLAIMS \_\_\_\_\_

### SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

### RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_  
(type, depth – include outcrop map)

### OTHERS (SEISMIC, DRILL, WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

### AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

Instrument(s) \_\_\_\_\_  
(specify for each type of survey)

Accuracy \_\_\_\_\_  
(specify for each type of survey)

Aircraft used \_\_\_\_\_

Sensor altitude \_\_\_\_\_

Navigation and flight path recovery method \_\_\_\_\_

Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_

Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

# GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Number of Samples \_\_\_\_\_

Type of Sample \_\_\_\_\_  
(Nature of Material)

Average Sample Weight \_\_\_\_\_

Method of Collection \_\_\_\_\_

Soil Horizon Sampled \_\_\_\_\_

Horizon Development \_\_\_\_\_

Sample Depth \_\_\_\_\_

Terrain \_\_\_\_\_

Drainage Development \_\_\_\_\_

Estimated Range of Overburden Thickness \_\_\_\_\_

## ANALYTICAL METHODS

Values expressed in:      per cent        
                                    p. p. m.        
                                    p. p. b.     

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others \_\_\_\_\_

Field Analysis ( \_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

## Field Laboratory Analysis

No. ( \_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory ( \_\_\_\_\_ tests)

Name of Laboratory \_\_\_\_\_

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

## SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis \_\_\_\_\_

General \_\_\_\_\_

General \_\_\_\_\_

## LEGEND

CENOZOIC  
QUATERNARY

Pleistocene, Recent  
Clay, sand, gravel, till

*Unconformity*

PRECAMBRIAN

MIDDLE PRECAMBRIAN

Mafic Intrusive Rocks

7a Diabase

*Intrusive Contact*

Huronian Supergroup

Cobalt Group

Gowganda Formation

6

6a Mudstone, argillite

6b Sandstone, arkose, wacke

6c Conglomerate

*Unconformity*

EARLY PRECAMBRIAN

Mafic Intrusive Rocks

5

5a Diabase

*Intrusive Contact*

Felsic Intrusive Rocks

4

4a Porphyritic monzonite

4b Granodiorite

*Intrusive Contact*

Felsic Metavolcanic Rocks

3

3a Very fine - nonporphyritic tuffs and flows

Intermediate Metavolcanic Rocks

2

2a Massive flows - Tholiitic andesite - Calc-alkalic basalt

2b Plagioclase porphyritic

2c Pyroclastic breccia - porphyritic

2d Pyroclastic breccia - nonporphyritic

2e K-feldspar porphyritic

Mafic Metavolcanic Rocks

1

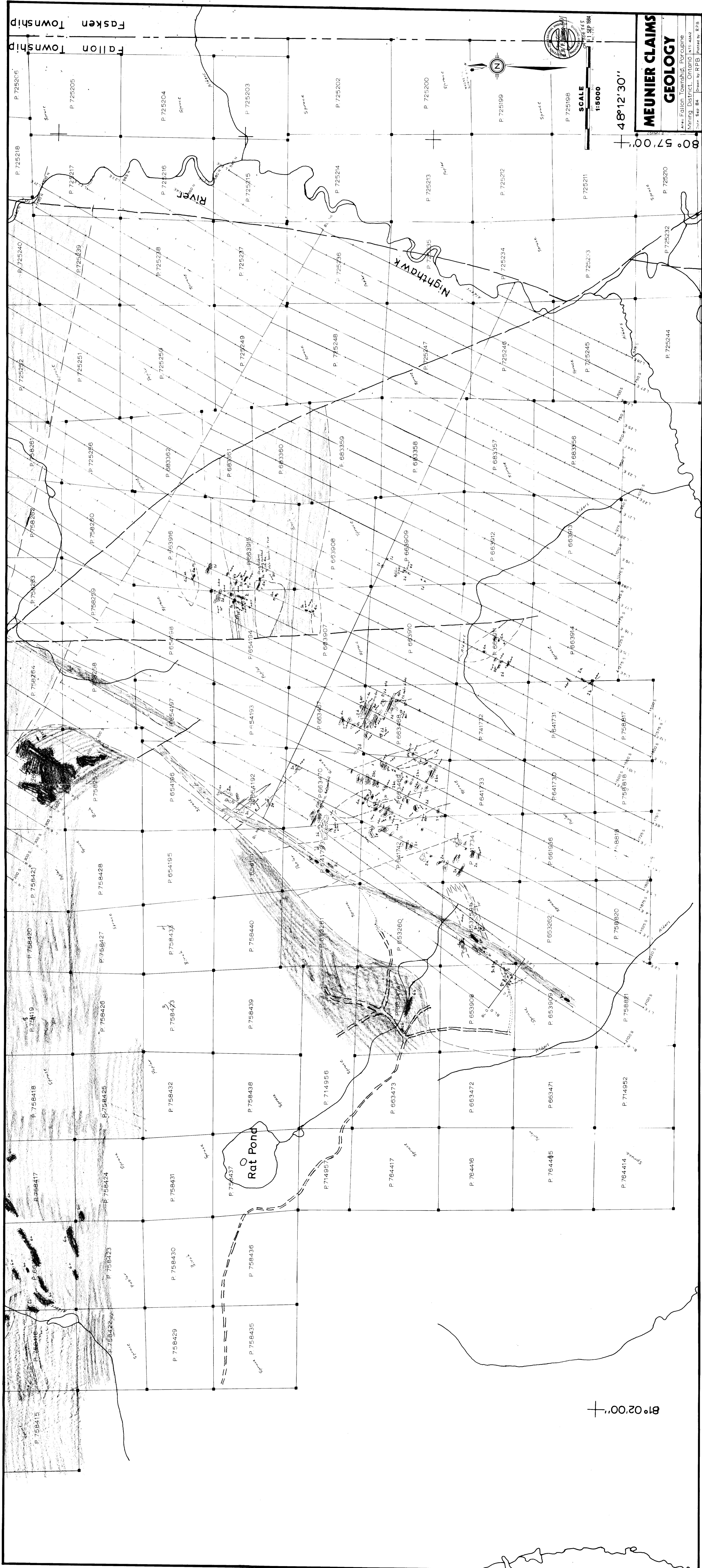
1a Massive iron tholiitic basalt

1b Pillowed iron tholiitic basalt

1c Brecciated basalt

1d Porphyritic basalt

1e Massive coarse grained basalt (gabbro)



# MEUNIER CLAIMS

GEOLOGY

4ac Fallon Township, Forcopic Inc  
Mining District, Ontario NTS 42-A/2  
Date Sept 84 Drawn by RPB

NORTH SHEET

