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NOV 25 1982

MINING LANDS SECTION

REPORT ON A GEOLOGICAL SURVEY



42A03NE0079 2.5224 BARTLETT

010

BART-3

PRICE 035-10

NTS: 42-A-3/6

AMAX MINERALS EXPLORATION

Timmins, Ontario  
August, 1982

S. Davies



42A03NE0079 2.5224 BARTLETT

010C

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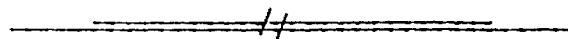
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SUMMARY

During June of 1982, a geological survey was conducted on eight (8) claims in east central Bartlett township, District of Timiskaming, Ontario.

The property is underlain by felsic to intermediate volcanics, chert, mafic dykes and a felsic intrusive.

The airborne electromagnetic anomaly was explained by the presence of a gabbroic dyke containing pyrite and pyrrhotite.

It is recommended that no further work be conducted at this time.

## INTRODUCTION

A detailed geological survey was carried out on a group of eight (8) claims in Bartlett township during June of 1982. The claim numbers are P-618277-84 and are recorded in the name of Amax of Canada Limited.

The property covers several air electromagnetic anomalies uncovered during a helicopter-borne survey carried out by Amax in August of 1980. The anomalies trend approximately north-south through the centre of the claim group.

## LOCATION AND ACCESS

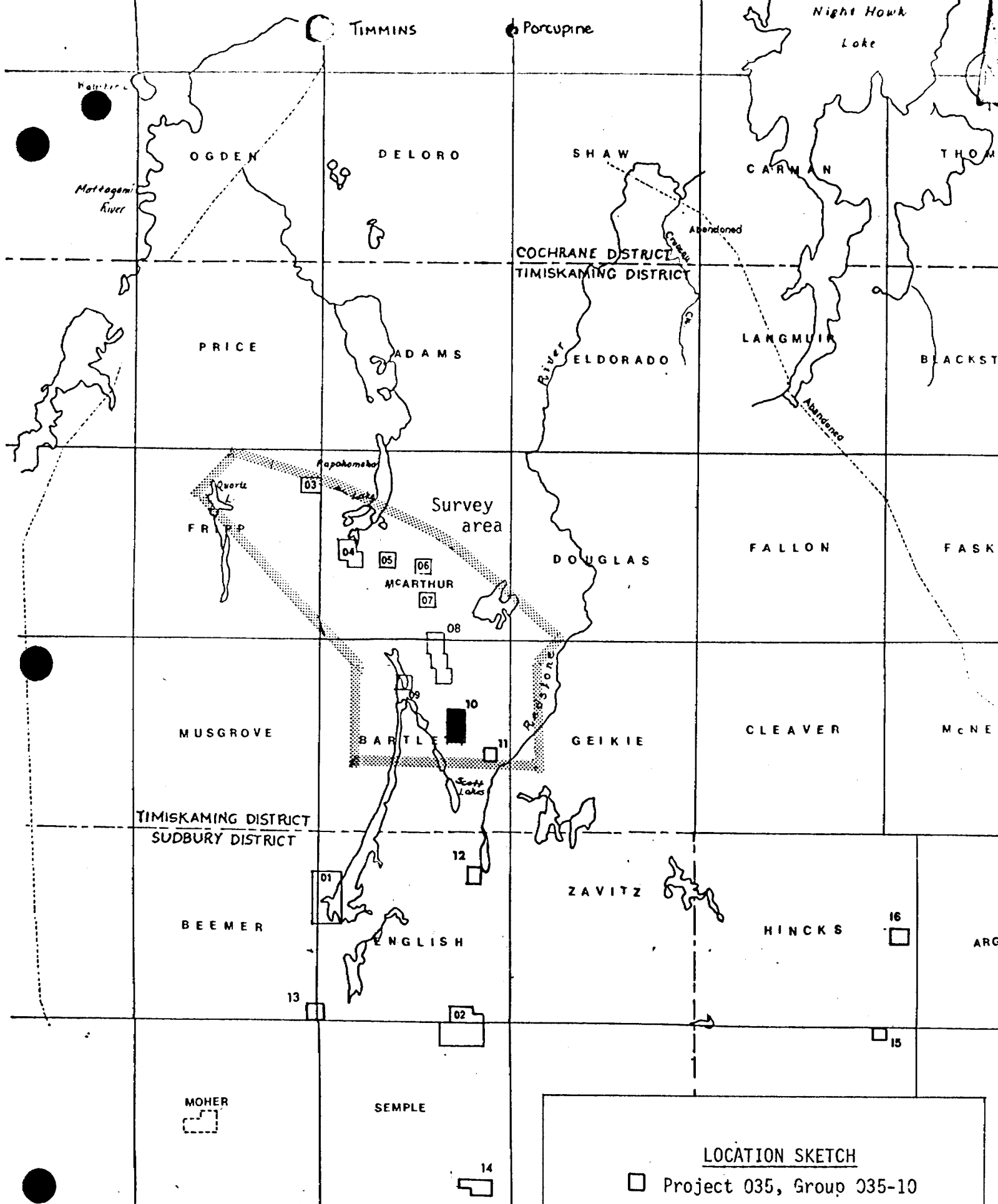
The group of eight claims is situated in central Bartlett township in the District of Timiskaming, Ontario.

The property is located about 2 kilometres east, along the old Texmont Mine access road at the Scott Lake boat launch.

## TOPOGRAPHY AND RESOURCES

The relief on the property is quite low with swampy ground predominating in the south and west claims.

Vegetation consists of mature stands of spruce,



LOCATION SKETCH

□ Project 035, Group 035-10

Scale: 1:250,000

pine and poplar in the northeast claims and scattered spruce, cedar and alders in the swampy areas.

Water for diamond drilling is available from Boomerang Lake, from a small lake in claim P-618279 and from a swamp in the southwest portion of claim P-618281.

#### PREVIOUS WORK

##### From Assessment Files

In 1956, Paymaster Consolidated conducted magnetic and vertical loop geophysical surveys in the area. A number of diamond drill holes were drilled into felsic metavolcanics. Assay results were nil to 0.02 oz/ton Au.

In 1965, Silver Summit Mines Limited did linecutting, geophysics and diamond drilling. Low values of Ni were found. From 1969 to 1970 they found low values of Cu and Ni together with gold. Prospecting and trenching near Au values were recommended but not carried out.

##### In the Field

None.

#### SURVEY METHOD

The survey was performed by S. Davies and L. de St. Jorre during June, 1982. Air photos at a scale of 1"=¼ mile and air photo blow-ups at a scale of 1:5,000 were used as control while

mapping. Traverse lines were run using pace and compass at 125 metre intervals across the claims.

#### REGIONAL GEOLOGY

Early Precambrian (Archean) metavolcanic and plutonic rocks underlie most of the area.

Two cycles of volcanism are recognized, each consisting of a lower unit of ultramafic metavolcanics, an overlying unit of mafic metavolcanics and an upper unit of intermediate to felsic metavolcanics.

A pre-tectonic, layered gabbroic sill and minor felsic epizonal intrusions are largely confined to the lower sequence of metavolcanics.

Late tectonic stocks of granodiorite and monzonite were emplaced within the metavolcanic-metasedimentary succession. The lower sequence of mafic and ultramafic metavolcanics was intruded by a large complex granitic batholith composed of at least three separate intrusive phases.

Diabase dykes are numerous and are not confined to a specific metavolcanic sequence.

The major structural features in the area consist of a domal structure in Geikie township that is flanked by large synclines to the north and south and numerous north trending faults which are probably part of the Onaping Lineament.

Paymaster Cons.  
1956



V4  
Power  
line  
Boomerang L.

Payqueen Nickel  
1957

035-10  
Bart-3

Texmont Mine  
access road

LEGEND

- V4 ■ Dacite
- IF ■ Iron Formation
- QFP ■ Quartz Feldspar Porphyry
- 3g ■ Gabbro

- Outcrop
- Geological Contact - observed
- Geological Contact - inferred

- Drill Hole
- Paymaster Cons. 1956 - E.M. & Mag Surveys  
- Holes drilled in felsic metavolcanics
- Payqueen Nickel Mines- 2 holes drilled in  
1957 Bartlett Township.

AMAX MINERALS EXPLORATION

PROJECT : Price (035)  
 GROUP : 035-10; Bart-3  
 TOWNSHIP: Bartlett  
 SURVEY : Compilation  
 DATE : August, 1982  
 SCALE : 1" = 1/2 mile



TABLE OF FORMATIONS

PHANEROZOIC

CENOZOIC

Quaternary - Pleistocene and recent

-----Unconformity-----

PRECAMBRIAN

LATE PRECAMBRIAN, MIDDLE PRECAMBRIAN - Olivine, quartz diabase  
Huronian Supergroup

Cobalt Group

Gowganda Formation: Greywacke, arkose, conglomerate

-----Unconformity-----

EARLY PRECAMBRIAN (ARCHEAN)

Mafic Intrusive Rocks

Diabase

-----Intrusive Contact-----

Felsic Intrusive Rocks

-----Intrusive Contact-----

Metamorphosed Mafic and Ultramafic Rocks

Gabbro, serpentized peridotite, quartz gabbro

-----Intrusive Contact-----

METAVOLCANICS AND METASEDIMENTS

Intermediate to Felsic Volcanics:

Tuff, breccia, massive to pillowed flows, interlayered  
siltstone, greywacke

Mafic Metavolcanics:

Massive and pillowed flows, tuff, volcanic breccia,  
pyroclastic rocks

Ultramafic Metavolcanics:

Serpentinized peridotite, spinifex texture flows,  
tuff, carbonatized peridotite

## PROPERTY GEOLOGY

The property 035-10 is situated on the southern margin of a small felsic intrusion which was emplaced in the Upper Volcanic Formation in the Lower Volcanic Group.

Felsic volcanic flows (dacite) were found striking approximately north-east through the central part of the claim group. It is flanked on either side by intermediate to felsic crystal tuff. Chert and cherty sediments were also found in the west central part of the claims and in the southeast claims.

The volcanics were weakly foliated and mineralized. The chert was well bedded, striking north-east and dipping to the southeast. Excellent exposure of the chert on the powerline in P-618281 showed graded bedding, flame structures and pseudo-nodules. Tops of the beds were interpreted to be to the southeast. The chert was well mineralized with pyrite occurring up to 20% in places.

Three gabbroic intrusions were also found on the property. One gabbroic dyke was found striking north-south through the centre of the claim group. It was moderately mineralized with pyrite and minor pyrrhotite.

The two other gabbro dykes were found in the southwest corner of claim P-618281. They were both serpentized and poorly mineralized.

Granite was found underlying the northwest portion of the group.

#### CONCLUSIONS AND RECOMMENDATIONS

The property is located on the margin of a felsic intrusion. It is underlain by felsic to intermediate volcanics, chert, cherty sediments and a series of mafic (gabbro) dykes.

The airborne electromagnetic anomaly was explained by the presence of a gabbro dyke which was mineralized with pyrite and pyrrhotite.

The highly mineralized chert was sampled and assayed and returned nil to trace amounts of Au.

It is recommended that no further work be done on the property at this time.

Timmins, Ontario  
August, 1982

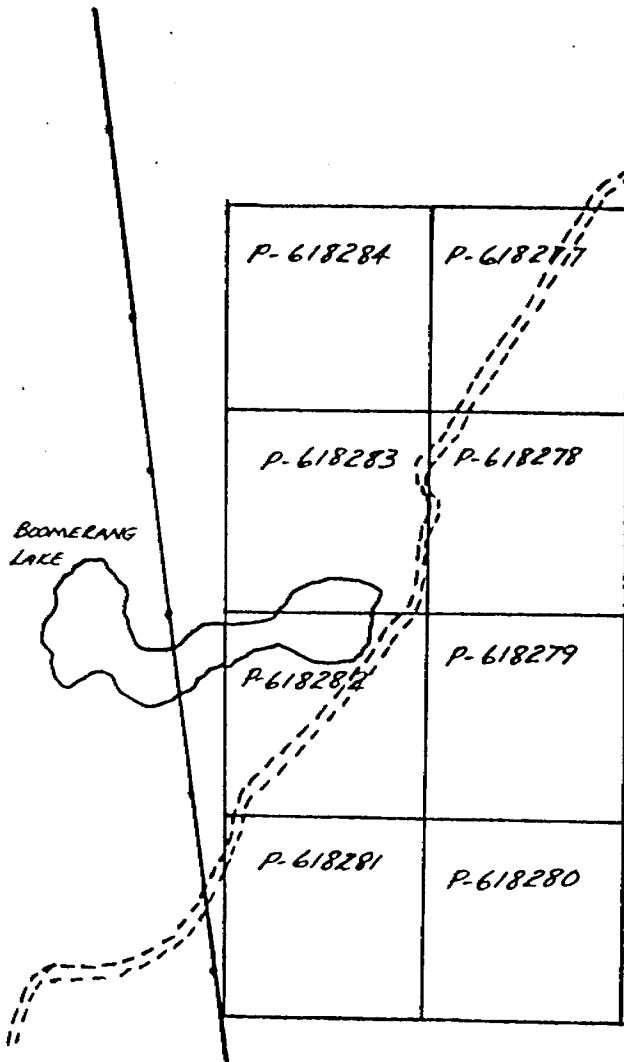
Respectfully submitted,

*S. Davies*

S. Davies



BARTLETT TWP.



CLAIM SKETCH

Project 035-10

BART-3

Bartlett Township

Scale: 1" = 1/4 mile

APPENDIX A

SCHEDULE OF CLAIMS

PROJECT Bart-2

Price, 035-10

Claim Group	Township	Number	Claim Numbers	Recording Date
035-10	Bartlett	8	P-618277	May 21, 1981
Bart-2			P-618278	May 21, 1981
			P-618279	May 21, 1981
			P-618280	May 21, 1981
			P-618281	May 21, 1981
			P-618282	May 21, 1981
			P-618283	May 21, 1981
			P-618284	May 21, 1981

DECLARATION

I, Joseph A. MacPherson, of the City of Sudbury, in the Province of Ontario, with a mailing address of 255 Algonquin Blvd. West, Timmins, Ontario, do hereby declare:

1. I am a geologist employed by Amax of Canada Limited, with offices at 255 Algonquin Blvd. West, Timmins, Ontario.
2. I completed an honours B.Sc. programme (geology) in 1980 at Laurentian University in Sudbury, Ontario.
3. I did personally set forth the facts as outlined in this report and did conduct or supervise, or review, the work contained herein.
4. I do not have, nor do I expect to have, any interest in the properties held by Amax of Canada Limited.

*Joseph A. MacPherson*  
Joseph A. MacPherson

Dated at Timmins, Ontario



W820600369

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



42A03NE0079 2.5224 BARTLETT

900

rsed  
list.  
the  
ered  
columns.

035-10

The Mining Act L. J. L. T.

Do not use shaded areas below.

Type of Survey(s) <b>Geological Survey</b>	Township or Area <b>Bartlett</b>
Claim Holder(s) <b>Amax of Canada Limited</b>	Prospector's License No. <b>A-38495</b>
Address <b>255 Algonquin Blvd. West, Timmins, Ontario. P4N 2R8</b>	
Survey Company <b>Amax Minerals Exploration</b>	Date of Survey (from & to) Day   Mo.   Yr. <b>06   82</b>
Name and Address of Author (of Geo-Technical report) <b>Sandra Davies, 255 Algonquin Blvd. West, Timmins, Ontario. P4N 2R8</b>	

2.5224

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	20
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Airborne Credits  Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	618277	20			
	618278	20			
	618279	20			
	618280	20			
	618281	20			
	618282	20			
	618283	20			
	618284	20			

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Expenditures (excludes power stripping)

Type of Work Performed
Performed on Claim(s)
Calculation of Expenditure Days Credits
Total Expenditures \$ <input type="text"/> + 15 = <input type="text"/>
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.

FORCUPINE MINING DIVISION  
RECEIVED  
SEP 28 1982  
AN 7 3 9 10 11 12 13 14 15 PA

RECORDED  
SEP 28 1982  
Receipt No. ....

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

Date <b>Sept. 22, 1982</b>	Recorded Holder or Agent (Signature) <i>Rosemary Valley</i>
-------------------------------	--

For Office Use Only	
Total Days Cr. Recorded <i>160</i>	Date Recorded <i>Sept 28/82</i>
Date Approved as Recorded <i>82.07.00</i>	Mining Recorder <i>[Signature]</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 or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying  
**J. MacPherson**

255 Algonquin Blvd. W., Timmins, Ont. P4N 2R8

Date Certified  
*Sept 24/82*

Certified by (Signature)  
*[Signature]*

Apr 31/83

Mining Lands Comments

~~no qualifications~~  
OK

To: Geophysics

Comments

Approved  Wish to see again with corrections

Date

Signature

To: Geology - Expenditures

M/R Kustra

Comments

Qualifications are for supervisor of project

Approved  Wish to see again with corrections

Date

Signature

Mar 7 / 83

C Kustra

To: Geochemistry

Comments

IP

Approved  Wish to see again with corrections

Date

Signature

To: Mining Lands Section, Room 6462, Whitney Block.

(Tel: 5-1380)



1982 12 02

2.5229

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

Dear Sir:

We have received reports and maps for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 618277 et al in the Township of Bartlett.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1380

DW:sc

cc: Amax of Canada Limited  
255 Algonquin Blvd West  
Timmins, Ontario  
P4N 2R8  
Attn: Sandra Davies.



**MINERALS EXPLORATION**  
(A Division of AMAX OF CANADA LIMITED)

255 Algonquin Blvd. West  
Timmins, Ontario  
P4N 2R8

Telephone: (705) 264-5247

November 24, 1982

Our File: 035-10

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NOV 25 1982

**MINING LANDS SECTION**

Mr. F. W. Matthews,  
Ontario Ministry of Natural Resources,  
W1617, Whitney Block,  
Queen's Park,  
Toronto, Ontario.  
M7A 1W3

Re: Mining Claims P.618277 et al.,  
Bartlett township

Dear Sir:

Enclosed herewith please find two (2) copies of a report concerning a geological survey which was performed over the below listed contiguous mining claims located in Bartlett township.

P.618277	P.618278	P.618279	P.618280
P.618281	P.618282	P.618283	P.618284

A Report of Work has been filed with Mr. William Good,  
Mining Recorder for the Porcupine Mining Division.

Thank you.

Yours truly,  
AMAX OF CANADA LIMITED

  
Rosemary Tittley (Mrs.)  
Land Recorder

Encs. 2

c.c. K. Clemis/E. Barclay  
W. Good, Mining Recorder



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) Geological Survey

Township or Area Bartlett

Claim Holder(s) Amax of Canada Limited

Survey Company Amax Minerals Exploration

Author of Report Sandra Davies

Address of Author 255 Algonquin Blvd. W., Timmins, Ont.

Covering Dates of Survey June 1982  
(linecutting to office)

Total Miles of Line Cut \_\_\_\_\_

MINING CLAIMS TRAVERSED  
List numerically

(prefix)	(number)
P	618277
P	618278
P	618279
P	618280
P	618281
P	618282
P	618283
P	618284

If space insufficient, attach list

SPECIAL PROVISIONS  
CREDITS REQUESTED

DAYS  
per claim

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

ENTER 20 days for each  
additional survey using  
same grid.

Geophysical	_____
--Electromagnetic	_____
--Magnetometer	_____
--Radiometric	_____
--Other	_____
Geological	<u>20</u>
Geochemical	_____

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

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

DATE: Sept. 1, 1982 SIGNATURE: Sandra Davies  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications None

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 8

OFFICE USE ONLY

**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 \_\_\_\_\_

Elevation accuracy \_\_\_\_\_

**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 \_\_\_\_\_

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 \_\_\_\_\_

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

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

General \_\_\_\_\_

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 \_\_\_\_\_

General \_\_\_\_\_

McArthur Tp. - M. 298

THE TOWNSHIP OF  
OF  
**BARTLETT**

DISTRICT OF  
TIMISKAMING

PORCUPINE  
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND ● or ⊕
- CROWN LAND SALE C.S.
- LEASES ⊙
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS ———
- IMPROVED ROADS ———
- KING'S HIGHWAYS ———
- RAILWAYS ———
- POWER LINES ———
- MARSH OR MUSKEG ———
- MINES \*
- CANCELLED X
- PATENTED S.R.O. ●

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

Areas withdrawn from staking under Section 13 of the Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition
①	W.19/77 174108	1/3/77	S.R.O.
②	W.19/77 188543	10/4/78	S.R.O.

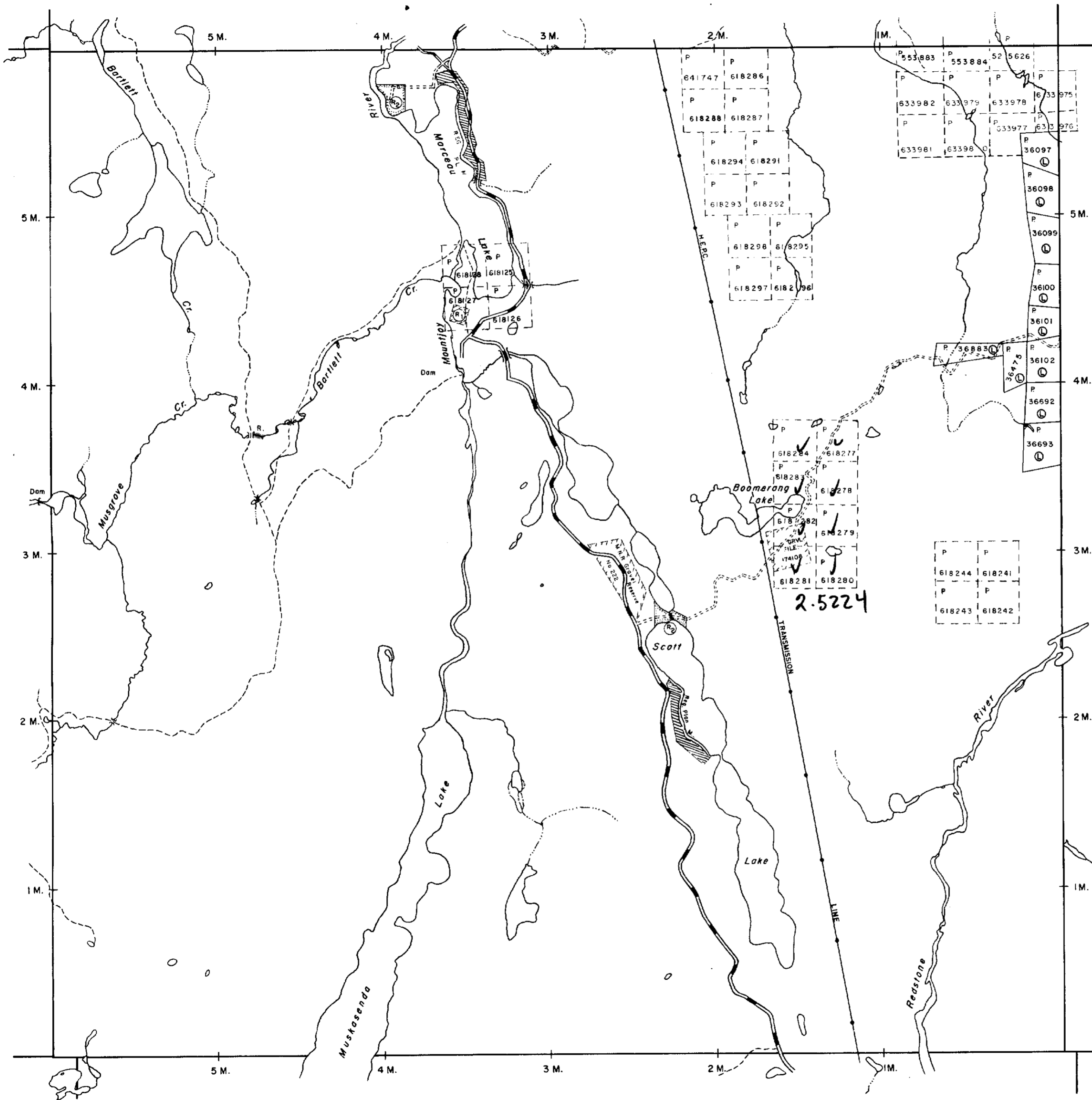
DATE OF ISSUE  
**JUL - 4 1983**  
 Ministry of Natural Resources  
 TORONTO

PLAN NO.- **M-262**

ONTARIO  
 MINISTRY OF NATURAL RESOURCES  
 SURVEYS AND MAPPING BRANCH

Musgrove Tp. - M. 304

Geikie Tp. - M. 320



English Tp. - M. 787



