



42A06NW0209 2.4345 OGDEN

010

REPORT ON A GEOLOGICAL SURVEY

RECEIVED

DEC 1 - 1981

MINING LANDS SECTION

OGDEN-11

PROJECT 1043-28

NTS: 42-A-6

AMAX MINERALS EXPLORATION

Timmins, Ontario
October, 1981

P. Lickley

SUMMARY

During July of 1981, a detailed geological survey was performed on five (5) claims near the north west corner of Ogden township, District of Cochrane, Ontario.

The property is interpreted as being underlain by sediments.

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

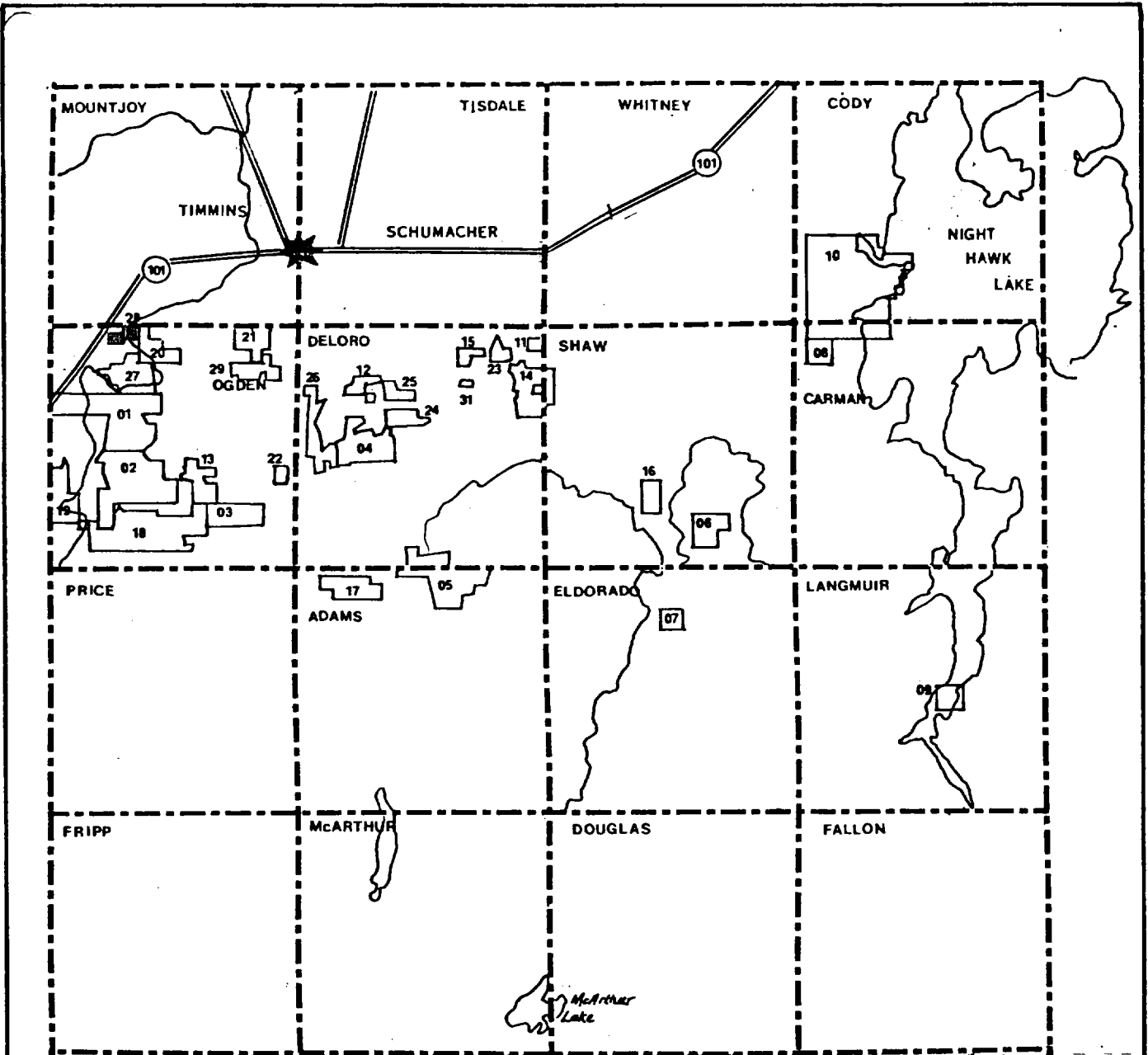
INTRODUCTION

During July of 1981, a detailed geological survey was carried out on a group of five (5) claims located in the north-west corner of Ogden township, District of Cochrane, Ontario. The claim numbers are P-595962 to P-595966 inclusive and are recorded in the name of Amax of Canada Limited.

This area was not covered by the 1979 Aerodat airborne geophysics survey though the Government Regional Magnetic Survey indicates that sedimentary rocks underlie the claims.

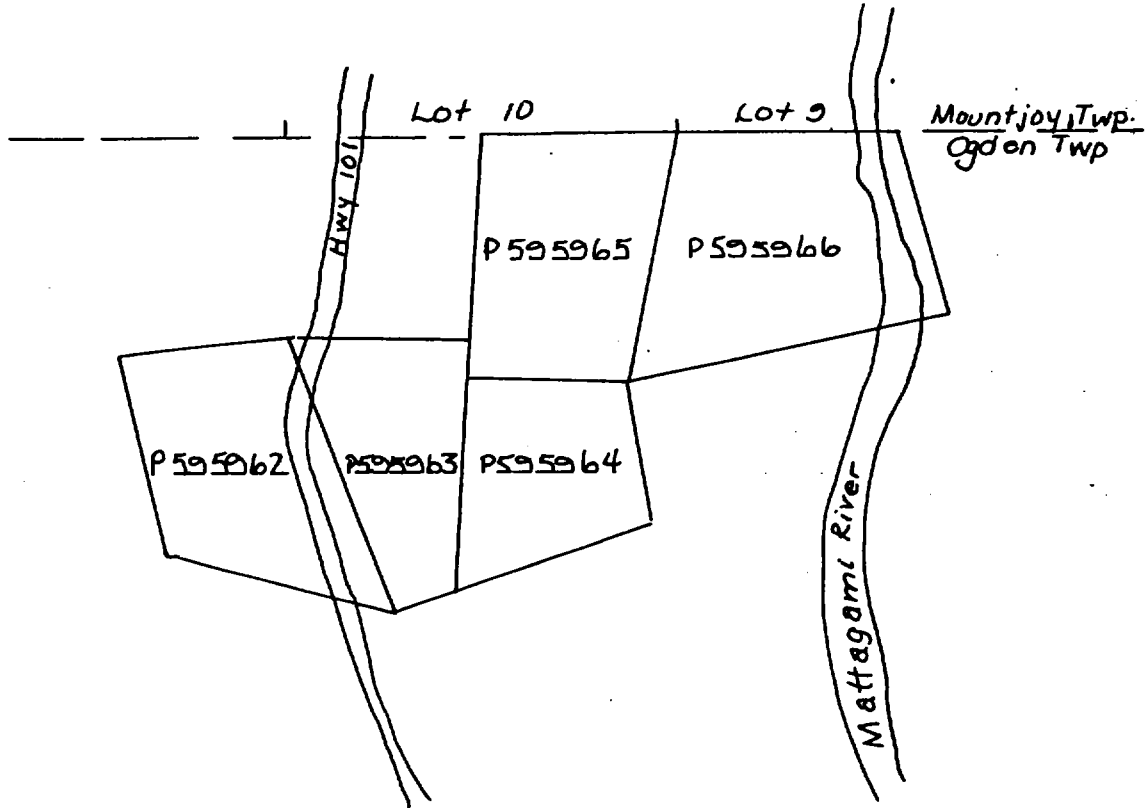
LOCATION AND ACCESS

The property is located near the north west corner of



LOCATION MAP
 Project 1043-28

OGDEN-11
 1" = 4 miles



CLAIM MAP
Project 1043-28
OGDEN-11
Ogden Township
1" = ¼ mile

Ogden township, District of Cochrane, Ontario.

The property lies about five miles west of the city of Timmins along highway 101. The highway crosses the west end of the claims and the Mattagami River borders the claims to the east.

TOPOGRAPHY AND RESOURCES

The relief on the property is low. The topography slopes east toward the Mattagami River from dry sandy ground to low swamp and marsh.

Vegetation consists of mature poplar and jack pine stands in the west and mixed spruce, pine and alder in the lower swampy areas by the river.

The Mattagami River would provide the most accessible source of water for a diamond drill program.

PREVIOUS WORK

No evidence of previous work was found in the assessment files at the Mining Recorder's Office in Timmins or on the field.

SURVEY METHOD

The geological survey was conducted by P. Lickley and

TABLE OF FORMATIONS

CENZOIC

Quaternary

Recent

Swamp and stream deposits

Pleistocene

Till, clay, sand, gravel

Unconformity

PRECAMBRIAN

Mafic Intrusive Rocks

Olivine diabase, quartz diabase

Intrusive Contact

Huronian Supergroup

Gowganda Formation, Cobalt Group

Arkose, wacke, argillite, conglomerate

Unconformity

ARCHEAN

Mafic Intrusive Rocks

Diabase

Intrusive Contact

Felsic Intrusive Rocks

Quartz feldspar porphyry, granite, diorite, granodiorite

Metamorphosed Mafic Intrusive Rocks

Gabbro, quartz gabbro

Intrusive and Gradational Contact

Metamorphosed Ultramafic Intrusive Rocks
Serpentinized diorite, peridotite
Intrusive Contact

METAVOLCANICS AND METASEDIMENTS

Metasediments

Conglomerate, lithic wacke, iron formation

Metavolcanics

Felsic Calc Alkalic metavolcanics

Massive, fine-grained flows, tuff, lapilli tuff, breccia

Mafic Calc-alkalic metavolcanics

Massive, fine-grained flows, pillowed flows, tuff, lapilli
tuff and breccia, sheared, carbonated pyroclastics

Tholeiitic Metavolcanics

Massive to medium grained flows, pillowed flows and flow
breccia, minor tuff, lapilli tuff and breccia

Komatiitic Metavolcanics

Peridotite, olivine spinifex, carbonate and talc alteration

M. Hull during early July of 1981. Air photographs at a scale of 1:30,000 and air photo blow-ups at a scale of 1:5,000 were used as control.

Pace and compass lines were run along claim boundaries and at 125 metre intervals across the claims.

REGIONAL GEOLOGY

The volcanic rocks of the Timmins area consist of the older Deloro Group and the younger overlying Tisdale Group.

The Deloro Group is confined to a large domal structure centred in Shaw township. It grades from andesite and basalt flows in the lower portion to dacite and rhyolite pyroclastics near the top. A major change in volcanism marks the beginning of the Tisdale Group, the Lower Volcanic Formation of which is marked by serpentized ultramafic flows.

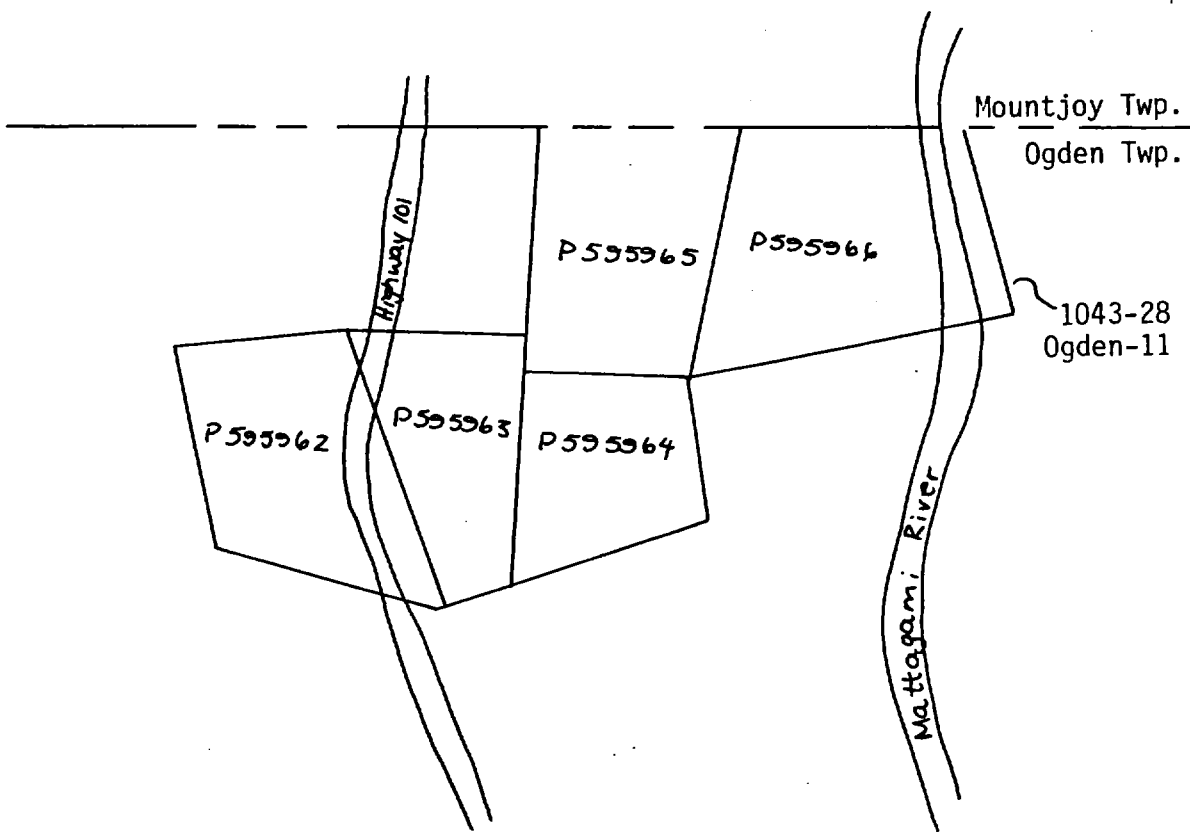
The Destor-Porcupine Fault is the major structural feature in the area, along with the Porcupine Syncline to the north of it and the Shaw Dome to the south.

PROPERTY GEOLOGY

No outcrop was found on the claims but interpretation of the Government Regional Magnetic Survey indicates that the area is underlain by sediments.

CONCLUSIONS AND RECOMMENDATION

The property, 1043-28 is interpreted as being under-



Note: No evidence of previous work found in field or the assessment files.

Area interpreted to be underlain by metasediments.

AMAX MINERALS EXPLORATION

PROJECT : DELORO (1043)
GROUP : 1043-28, Ogden-11
TWP : Ogden
Survey : Compilation
Date : August, 1981
SCALE : 1" = 1/4 mile

lain by sediments. No outcrop or geophysical anomalies exist on this property.

It is suggested that this property be dropped.

Timmins, Ontario
October, 1981

J. MacLachlan
Per
P. Lickley

APPENDIX A

SCHEDULE OF CLAIMS

OGDEN-11

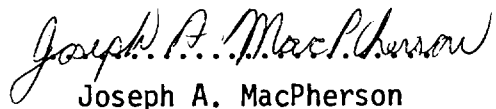
PROJECT 1043-28

<u>Claim Group</u>	<u>Township</u>	<u>Number</u>	<u>Claim Numbers</u>	<u>Recording Date</u>
1043-28	Ogden	5	P-595962	March 3, 1981
Ogden-11			P-595963	March 3, 1981
			P-595964	March 3, 1981
			P-595965	March 3, 1981
			P-595966	March 3, 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

Dated at Timmins, Ontario



Ministry of
Natural
Resources

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

Ogden



42A06NW0209 2.4345 OGDEN

900

#1490
1043-28

The Mining Act

Do not use shaded areas below.

Type of Survey(s) Geological Survey		Township or Area Ogden	
Claim Holder(s) Amax of Canada Limited		Prospector's Licence No. A-38495	
Survey Company Amax Minerals Exploration		Survey Dates (linecutting to office) Day 07 Mo. 81 Yr.	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) Peter Lickley, 255 Algonquin Blvd. West, Timmins, Ontario. P4N 2R8			

Special Provisions Credits Requested

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	595962	20			
	595963	20			
	595964	20			
	595965	20			
	595966	20			

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DEC 15 1981

MINING LANDS SECTION

RECORDED

NOV 27 1981

Receipt No.

Man Days

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

Airborne Credits

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

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s) **MINING DIVISION**

Calculation of Expenditure Days Credits

Total Expenditures **\$ 789,000.00** PPH **4.56** = Total Days Credits **3571.56**

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 **Nov. 24, 1981**

Recorded Holder or Agent (Signature) *Rosemary Lickley*

For Office Use Only

Total Days Cr. Recorded **100**

Date Recorded **Nov. 27/81**

Date approved as Recorded **June 16, 1982**

Total number of mining claims covered by this report of work. **5**

Branch Director *[Signature]*

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

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 _____

Instrument _____
Accuracy — Scale constant _____
Diurnal correction method _____
Base Station check-in interval (hours) _____
Base Station location and value _____

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

Parameters measured _____
Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

Elevation accuracy _____
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 _____

MAGNETIC

ELECTROMAGNETIC

GRAVITY

INDUCED POLARIZATION RESISTIVITY



Mining Lands Comments

Empty lined area for Mining Lands Comments.

To: Geophysics

Comments

Empty lined area for Geophysics comments.

Approved

Wish to see again with corrections

Date

Signature

To: Geology - Expenditures

Mr Kuska

Comments

Do we reduce the number of credits because no outcrop is found?

Approved

Wish to see again with corrections

Date

May 14/82

Signature

CKuska

To: Geochemistry

Comments

Empty lined area for Geochemistry comments, with a large handwritten 'LD' at the bottom.

Approved

Wish to see again with corrections

Date

Signature

December 7, 1981

2.4345

Office of the 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.595962 et al, in the Township of Ogden.

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

J. Skura/bk

cc: AMAX Minerals Exploration
Timmins, Ontario
Attention: Rosemary Tittley

November 24, 1981

Mr. F. W. Matthews,
Ontario Ministry of Natural Resources,
W 1617, Whitney Block,
Queen's Park,
Toronto, Ontario.
M7A 1W3

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DEC 1 - 1981

MINING LANDS SECTION

Dear Sir:

Enclosed herewith please find two (2) copies of a report on a geological survey which was carried out over the below listed contiguous mining claim located in Ogden township, along with their respective survey plans.

P-595962 P-595963 P-595964 P-595965
P-595966

Please note that although Mr. Peter Lickley was the author of the report, it has been signed by Mr. Joseph MacPherson, Project Geologist, as Mr. Lickley was employed by us for the summer field season only.

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

Thank you.

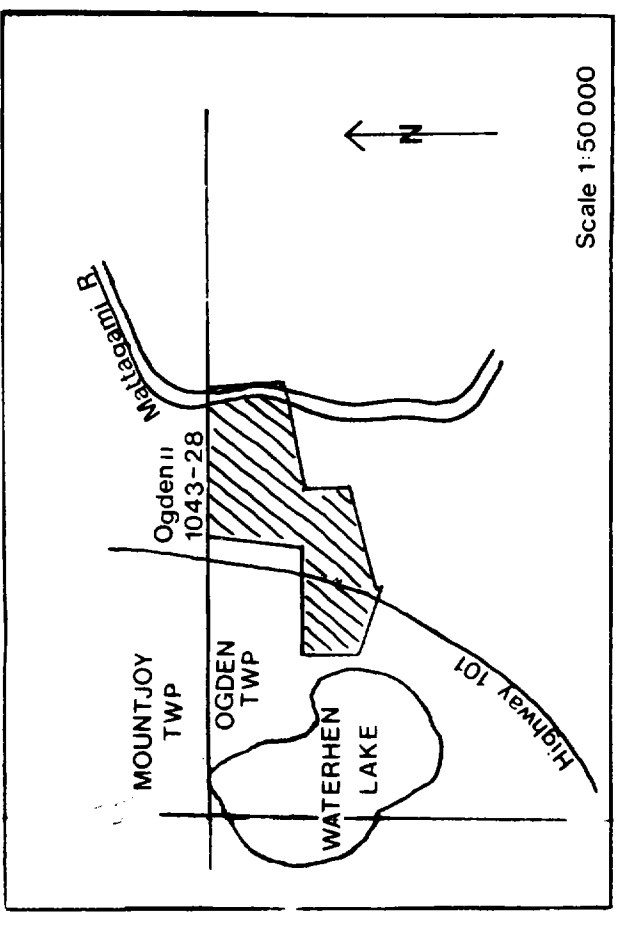
Yours truly,
AMAX OF CANADA LIMITED

Rosemary Little
Rosemary Little (Mrs.)
Land Recorder

Encs. 2

c.c. K. Clemis/E. Barclay, Toronto

L.D.



INDEX MAP

SYMBOLS

- - Claim Post Located
- - Claim Post Location Assumed
- + - Traverse Lines (direction indicated)
- - Physiological Boundary
- ☉ - Swamp
- == - Highway
- - Gravel Road
- - - - - Bush Road

NO OUTCROP FOUND

**Amax Minerals Exploration
OGDEN TOWNSHIP
GEOLOGICAL SURVEY**

OGDEN - 11,1043-28
Cochrane District
Scale 1:5000

NTS 42-A-6

To Accompany Report By: P. Lickley

July 1981

Timmins Ontario

J. MacPherson

2.4345