



41P06SE0018 2.4301 UNWIN

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2.4301

REPORT ON A GEOLOGICAL SURVEY

RECEIVED

NOV 23 1981

MINING LANDS SECTION

OGDEN-6

PROJECT 1043-19

NTS: 42-A-6

AMAX MINERALS EXPLORATION

Timmins, Ontario
October, 1981

J. MacPherson
Geologist

SUMMARY

During August of 1981, a detailed geological survey was carried out on a group of eighteen (18) claims located in west central Ogden township abutting the Bristol township border.

There is no outcrop on the property. However, it is thought to be underlain by an ultramafic body and metasediments.

It is recommended that a grid be cut and geophysics run on the ultramafic body in the hope that the geophysics may reveal silicified pyritized shears along the margins of the body which could be gold bearing.

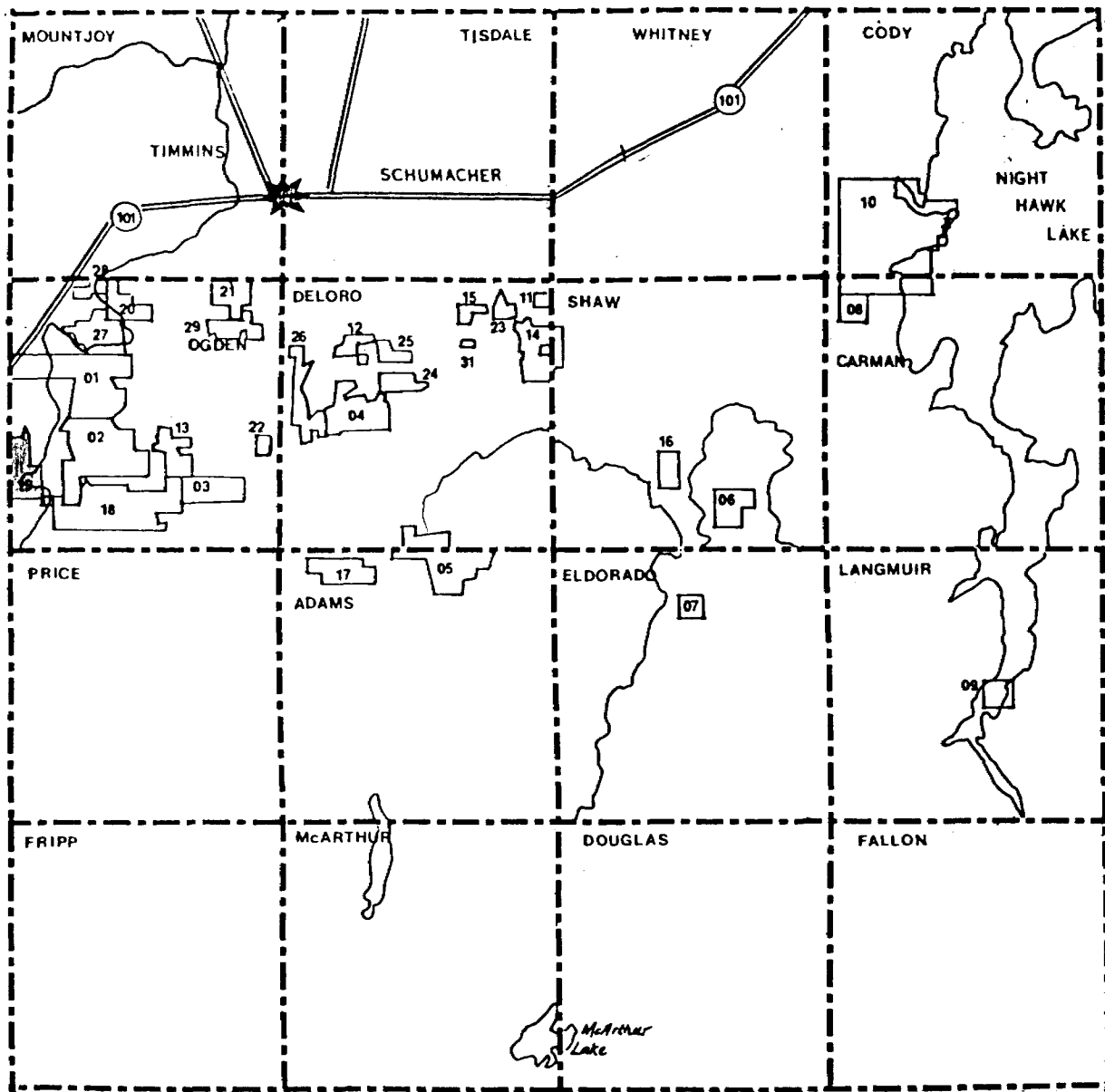
INTRODUCTION

During August, 1981, a detailed geological survey was carried out on a group of eighteen (18) claims located in west central Ogden township, abutting Bristol township. The claim numbers are P-594773 - 80, and P-595745-54, and are recorded in the name of Amax of Canada Limited.

This group is situated on a large airborne magnetic high, possibly indicating an ultramafic body. Shears present at the margins of this body could hold silicified zones which may be gold bearing. Examples of this type of gold mineralization are found in Tully township.

LOCATION AND ACCESS

The property is located against the Bristol-Ogden township border and lies within the west central part of Ogden township, District of Cochrane.



LOCATION MAP
 Project 1043-19

OGDEN-6
 1" = 4 miles

Lot 12

Lot 10

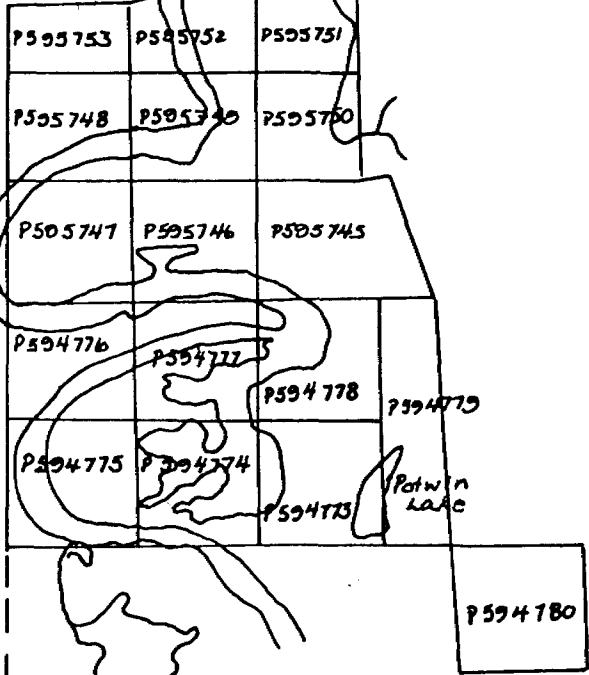
Bristol Twp.
Ogden Twp.

Ma. Mogami R.

N

3M

2M



CLAIM MAP

Project 1043-19

OGDEN-6

Ogden Township

1"=½ mile (approx.)

The property lies about eight miles south of the city of Timmins along the road to Wawaitin Falls. At this point a short walk of about 2000 feet due west is necessary to reach the property.

TOPOGRAPHY AND RESOURCES

The property is of low relief. The Mattagami River meanders through the property and would be the best and most accessible source of water for a diamond drill program.

Vegetation consists of alders along the river and poplar with spruce on the higher elevated areas.

PREVIOUS WORK

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

SURVEY METHOD

The survey was carried out by P. Lickley and assistants during early August, 1981. Air photos at a scale of 1:30,000 and air photo blow-ups of 1:5,000 were used as control for the geology survey.

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

Where topography allowed, pace and compass traverse lines at 400 foot spacings were run across the claim group to provide complete coverage.

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 part to dacite and rhyolite pyroclastics near the top. Oxide iron formation is the marker horizon which may be used to separate the two groups of rocks. 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 and the Shaw Dome to the south.

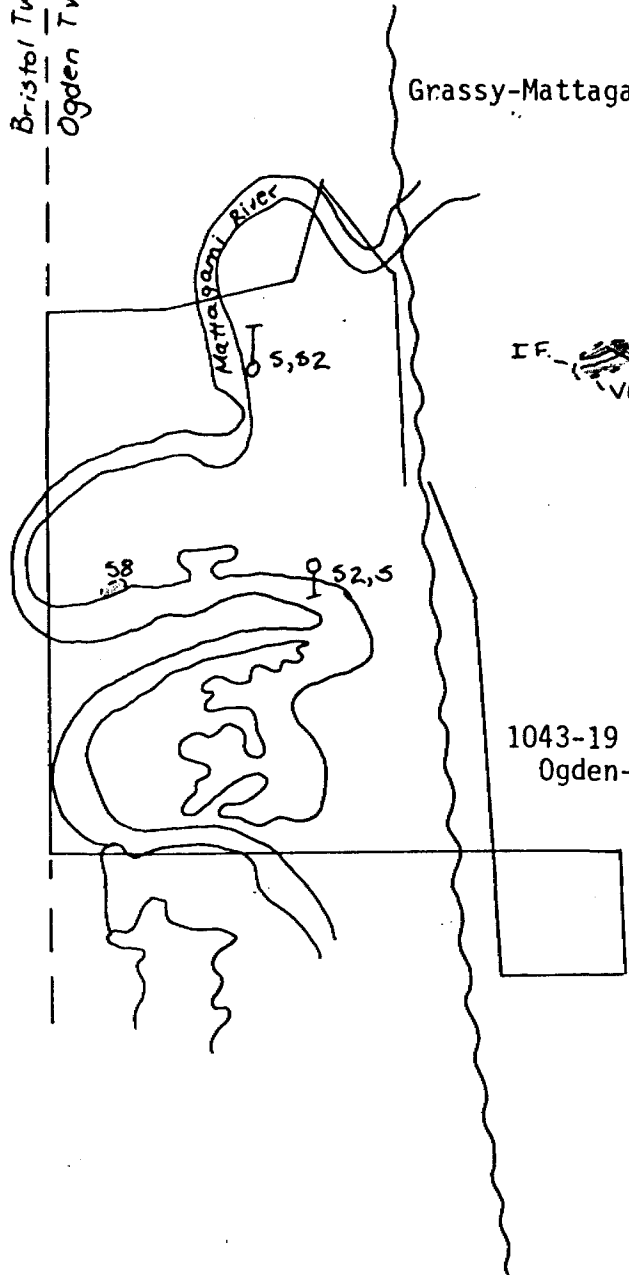
PROPERTY GEOLOGY

No outcrop was found on the property during the survey. However, the property is thought to be underlain by an ultramafic body and metasediments.



Bristol Twp
Ogden Twp.

Grassy-Mattagami Fault



LEGEND

- S Greywacke
- S2 Argillite
- S8 Iron Formation
- I.F. Andesite
- V6 Basalt
- V7 Outcrop Boundary
- Drill Hole
- Grassy - Mattagami Fault

AMAX MINERALS EXPLORATION

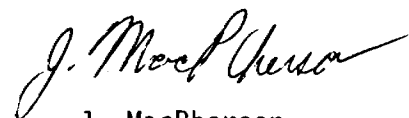
PROJECT : DELORO (1043)
 GROUP : 1043-19 , Ogden-6
 TWP : Ogden
 Survey : Compilation
 Date : August, 1981
 SCALE : 1" = 2640' (approx.)

CONCLUSIONS AND RECOMMENDATIONS

The geology survey did not locate outcrop due to overburden cover.

It is recommended that a grid be cut and geophysical surveys run on the interpreted ultramafic body. This may reveal targets in the form of shear zones along the edges of the ultramafic body. These shear zones could be silicified and gold bearing.

Timmins, Ontario
October, 1981



J. MacPherson
Geologist

APPENDIX A

SCHEDULE OF CLAIMS

OGDEN-6

PROJECT 1043-19

Claim Group	Township	Number	Claim Numbers	Recording Date
1043-19	Ogden	18	P-594773	December 30, 1980
Ogden-6			P-594774	December 30, 1980
			P-594775	December 30, 1980
			P-594776	December 30, 1980
			P-594777	December 30, 1980
			P-594778	December 30, 1980
			P-594779	December 30, 1980
			P-594780	December 30, 1980
			P-595745	December 30, 1980
			P-595746	December 30, 1980
			P-595747	December 30, 1980
			P-595748	December 30, 1980
			P-595749	December 30, 1980
			P-595750	December 30, 1980
			P-595751	December 30, 1980
			P-595752	December 30, 1980
			P-595753	December 30, 1980
			P-595754	December 30, 1980



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File _____

900

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 Ogden

Claim Holder(s) Amax of Canada Limited

Survey Company Amax Minerals Exploration

Author of Report Joseph MacPherson

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

Covering Dates of Survey August 1981
(linecutting to office)

Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	594773 ✓
P	594774 ✓
P	594775 ✓
P	594776 ✓
P	594777 ✓
P	594778 ✓
P	594779 ✓
P	594780 ✓
P	595745 ✓
P	595746 ✓
P	595747 ✓
P	595748 ✓
P	595749 ✓
P	595750 ✓
P	595751 ✓
P	595752 ✓
P	595753 ✓
P	595754 ✓

If space insufficient, attach list

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	DAYS per claim
Geophysical	
--Electromagnetic _____	
--Magnetometer _____	
--Radiometric _____	
--Other _____	
Geological _____	20
Geochemical _____	

ENTER 40 days (includes line cutting) for first survey.
ENTER 20 days for each additional survey using same grid.

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: _____ SIGNATURE: J. A. MacPherson
Author of Report or Agent

Res. Geol. _____ Qualifications 2.3797

Previous Surveys

File No.	Type	Date	Claim Holder
			<u>L.D.</u>

TOTAL CLAIMS 18

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 _____



Ministry of
Natural
Resources

Ontario

SEPT 24, 1982

Your file:

Our file: 2.4301

September 3, 1982

Mr. William Good
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.

Yours very truly,

E.F. Anderson
Director
Lands Administration Branch
Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

/em

Encl.

cc: Amax of Canada Limited
Timmins, Ontario

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



Ministry of
Natural
Resources

Ontario

Notice of Intent
for Technical Reports

2.4301

September 3, 1982

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 Lands Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.



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

Ogden Twp. # 475

P-594773

- 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.

1043-19

The Mining Act

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 Mo. Yr. 08 81
Name and Address of Author (of Geo-Technical report) J. MacPherson, 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)

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
P	594773	20			
	594774	20			
	594775	20			
	594776	20			
	594777	20			
	594778	20			
	594779	20			
	594780	20			
	595745	20			
	595746	20			
	595747	20			
	595748	20			
	595749	20			
	595750	20			
	595751	20			
	595752	20			
	595753	20			
	595754	20			

RECEIVED

NOV 26 1981

MINING LANDS SECTIC

RECORDED
NOV 20 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

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

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ 15 = Total Days Credits

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.

Total number of mining claims covered by this report of work. **18**

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
360	Nov. 20/81	<i>[Signature]</i>
Date Approved as Recorded	Regional/Branch Director	

Report Completed

Date of Report	Recorded Holder or Agent (Signature)
November 18, 1981	<i>Rosemary Villyer</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
Joseph MacPherson
255 Algonquin Blvd. West, Timmins, Ontario.

Date Certified	Certified by (Signature)
Nov. 18/81	<i>J. MacPherson</i>

Recorded Holder Amax of Canada Limited
Township or Area Ogden

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Section 86 (18) _____ days Geological <u>20</u> days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" 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.	P 594773 to 79 inclusive P 595745 to 54 inclusive

Special credits under section 86 (15a) for the following mining claims

No credits have been allowed for the following mining claims

<input checked="" type="checkbox"/> not sufficiently covered by the survey	<input type="checkbox"/> Insufficient technical data filed
P 594780	



~~24287~~
2.4301

Mining Lands Comments

L.D.

To: Geophysics

Comments

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
-----------------------------------	---	------	-----------

To: Geology - Expenditures

Mr. Kustka

Comments

<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>Mar 5/82</i>	Signature <i>Kustka</i>
--	---	----------------------	-------------------------

To: Geochemistry

Comments

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

November 27, 1981

2.4301

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.594773 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 of Canada Limited
Timmins, Ontario
Attention: Rosemary Tittley



MINERALS EXPLORATION
 (A Division of AMAX OF CANADA LIMITED)

255 Algonquin Blvd. West
 Timmins, Ontario
 P4N 2R8

Telephone: (705) 264-5247

November 18, 1981

Our File: 1043-19

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

RECEIVED

NOV 23 1981

MINING LANDS SECTION

Dear Sir:

Enclosed herewith please find two (2) copies of a report on a Geological Survey along with their respective survey plans, concerning a survey carried out over the below listed contiguous mining claims in Ogden township.

P-594773	P-594774	P-594775	P-594776
P-594777	P-594778	P-594779	P-594780
P-595745	P-595746	P-595747	P-595748
P-595749	P-595750	P-595751	P-595752
P-595753	P-595754		

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 Tittley
 Rosemary Tittley (Mrs.)
 Land Recorder

Encs. 2

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

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

2.4301

1982 10 15

2.4301

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

Dear Sir:

RE: Geological Survey on Mining Claims P 594773
et al in the Township of Ogden

The Geological Survey assessment work credits as listed with my Notice of Intent dated September 3, 1982 have been approved as of the above date.

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

Yours very truly

E.F. Anderson
Director
Land Management Branch

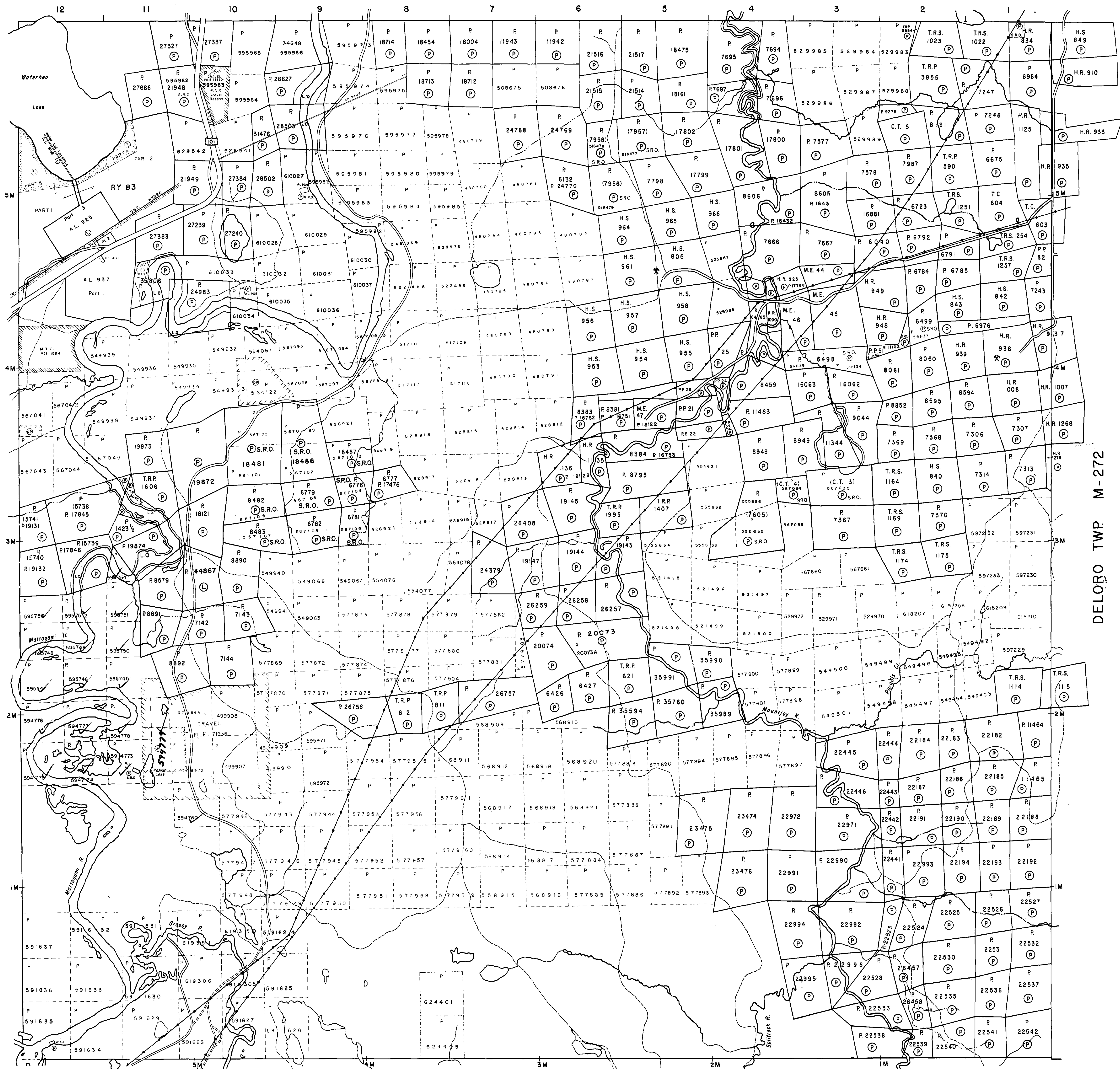
Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

A. Barr:sc

cc: Amax of Canada Limited
Timmins, Ontario

cc: Resident Geologist
Timmins, Ontario

MOUNTJOY TWP M-302



THE TOWNSHIP OF

OGDEN

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 20 CHAINS

LEGEND

- PATENTED LAND (P)
- CROWN LAND SALE (C.S.)
- LEASES (L)
- 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
- QUARRY PERMIT

NOTES

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

L.O. 6613 - Booming Grounds - covers the westerly half of the bed of the Mattagami River flowing through this township. File: 73543.

This township lies within the Municipality of CITY of TIMMINS.

Areas withdrawn from staking under Section 43 of the Mining Act.

File	Date	Disposition
189427	2/11/79	S.R.O.

DATE OF ISSUE

MAR - 1 1982

Ministry of Natural Resources TORONTO

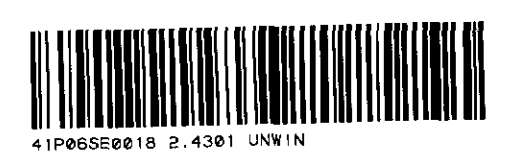
DELOORO TWP M-272

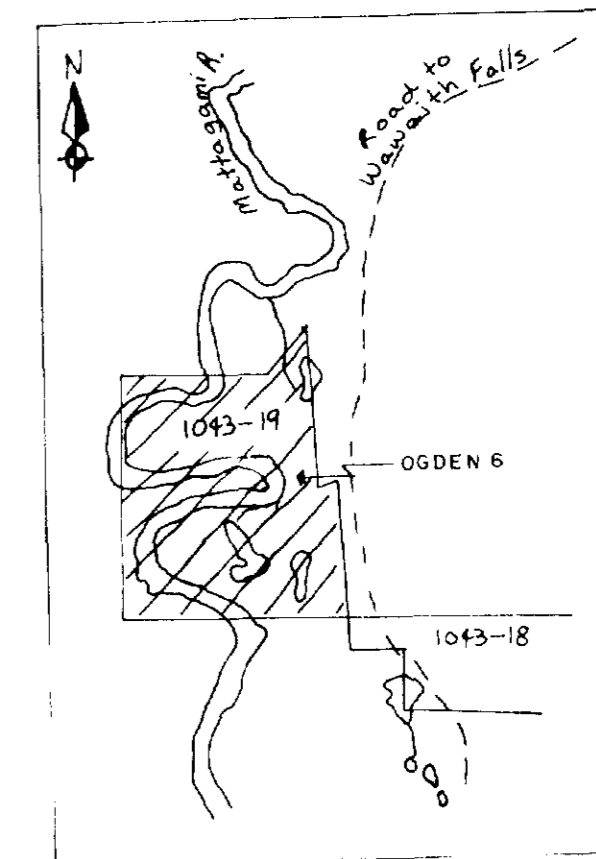
PRICE TWP M-307

PLAN NO. M-305

ONTARIO MINISTRY OF NATURAL RESOURCES SURVEYS AND MAPPING BRANCH

24301





INDEX MAP SCALE 1:20,000

SYMBOLS

- - Claim Post Located
- ⊠ - Claim Post Location Assumed
- - Traverse Line, Direction Indicated
- - Gravel Road
- - - - - Township Line
- - - - - Physiographic Boundary

Note: No Outcrops Found

AMAX MINERALS EXPLORATION
 GEOLOGY SURVEY
 OGDEN-6, 1043-19
 OGDEN TOWNSHIP
 DISTRICT OF COCHRANE
 SCALE: 1:5,000

NTS. 42-A-6
 TIMMINS OFFICE

DATE: JULY 25, 1981
 MAPPED BY: J. Mac PHERSON
 P. Lickley

J. D. MacPherson

