010

REPORT ON A GEOLOGICAL SURVEY

RECEIVED

DEC 1 - 1981

MINING LANDS SECTIO

DELORO-10

PROJECT 1043-26

NTS: 42-A-6

AMAX MINERALS EXPLORATION

SUMMARY

During late May and early June, 1981, a geological survey was performed on eleven (11) claims near the west central edge of Deloro township, District of Cochrane, Ontario.

The property is interpreted as being underlain by two major cycles of volcanism of the Upper Deloro Group.

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

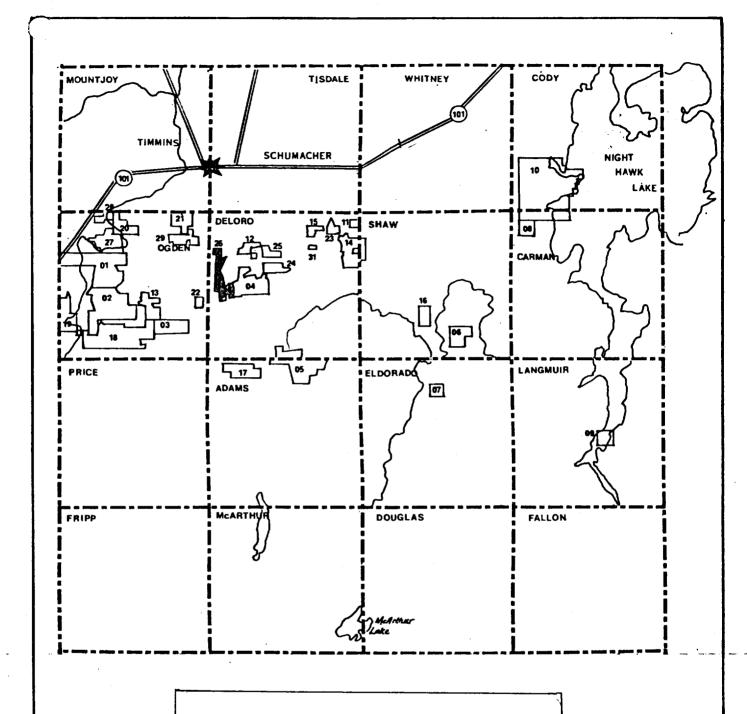
INTRODUCTION

During late May and early June, 1981, a detailed geological survey was carried out on a group of eleven (11) claims located in west central Deloro township, District of Cochrane, Ontario. The claim numbers are P-596283 to P-596293 inclusive, and are recorded in the name of Amax of Canada Limited.

The geology of the property is interpreted to be that of the Upper Deloro Group, south of the Destor-Porcupine Fault. There are no airborne anomalies on the property.

LOCATION AND ACCESS

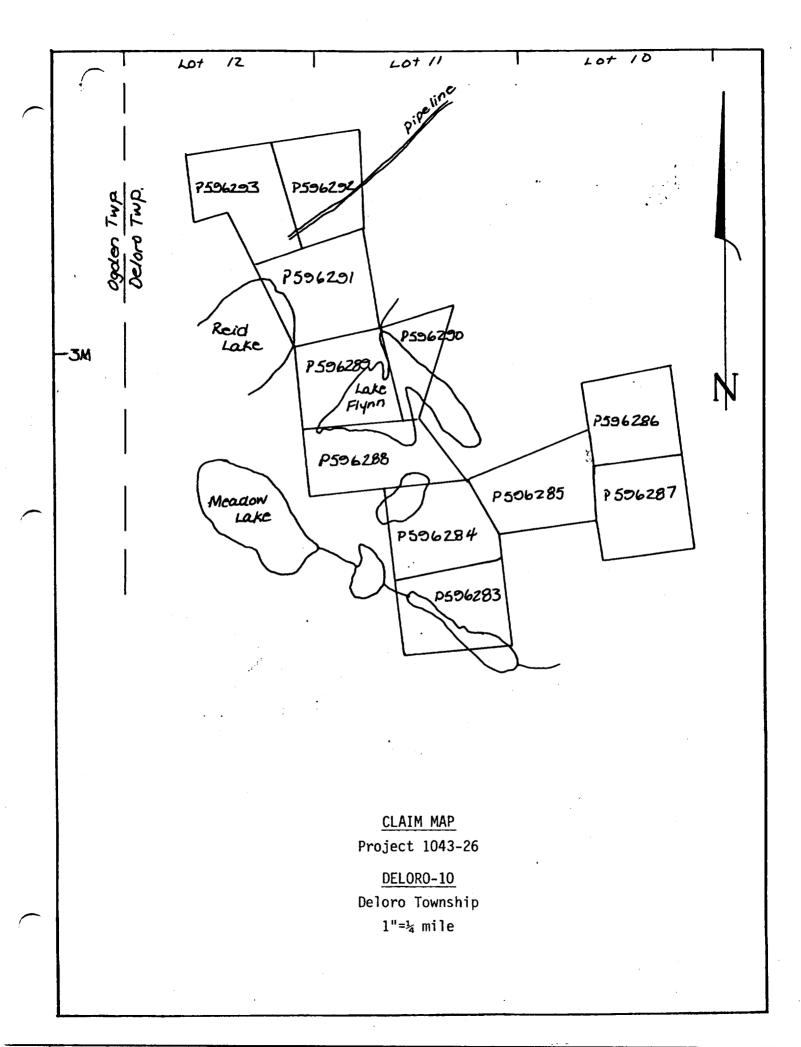
The group of eleven (11) claims is located along the west central edge of Deloro township in the District of Cochrane, Ontario.



LOCATION HAP Project 1043-26

DELORO-10

1"= 4 miles



The property is easily accessible via Pine Street South, five (5) kilometres from Timmins. A bush road leads to the north end of the property and access to the southeast part of the claims is only possible by boat, across Wealthy Lakes.

TOPOGRAPHY AND RESOURCES

The relief on the property is moderate to high where sand ridges are present along the east edge of Wealthy Lakes and in the north claims area. Elsewhere on the claims the relief is low and is covered by swamp.

Vegetation consists of stands of jack pine and mature poplar on the sand ridges and thick tangled tag alders in the swamps.

Small lakes, swamps and beaver ponds provide excellent sources of water for diamond drilling.

PREVIOUS WORK

From Assessment Files

The geology of this area was mapped in 1964-65 by the O.G.S. and published in Preliminary Map No. P. 347.

The northern most claims area was worked by GEOEX Limited in 1974-75. Two drill holes were drilled 700 feet north of the claims. All drill assays showed nil gold values.

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

In the Field

One set of overburden trenches was located in the north east corner of claim P-596289. No outcrop or broken debris was associated with the trenches.

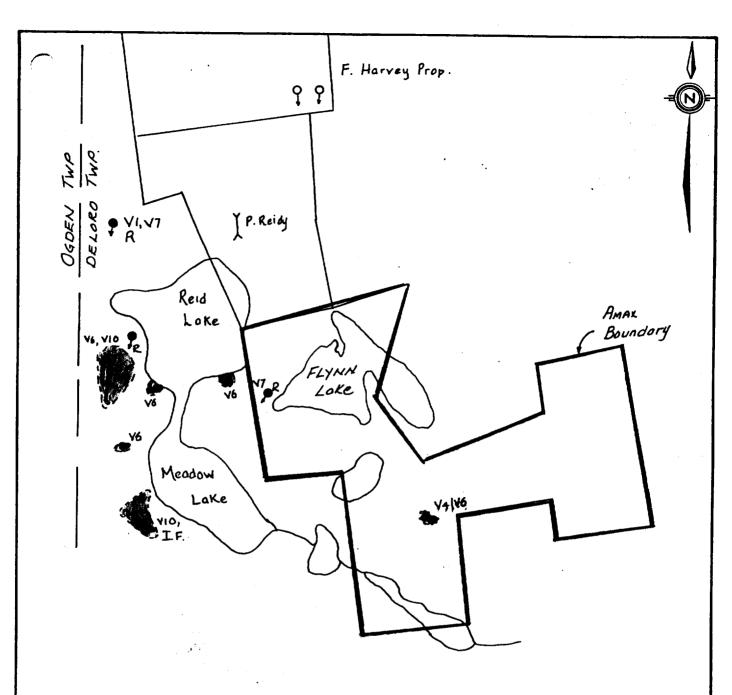
SURVEY METHOD

The survey was conducted by D. Messenger and P. Lickley during late May and early June, 1981. Airphotos at a scale of 1:30,000 and photo blow-ups at a scale of 1:5,000 were used as control. Pace and compass traverse lines were run along claim boundaries and at 125 metre intervals across the claims. A canoe was used to reach the south and eastern most portions of 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 serpentinized ultramafic flows.



LEGEND

- VI Undifferentiated mafic volcanics
- V6 Andesite
- V7 Basalt
- V10 Agglomerate
- Diamond Drill Hole
- → Trench
- (_) Outcrop Boundary

1. F. Harvey Property - 2DDH

Encountered chert, chlorite schist & dacite andesite tuffs. No Au values.

- R: Ridgegold Resources: 3DDH
- P: P. Reidy: 1 trench in IF.

AMAX MINERALS EXPLORATION

PROJECT: DELORO (1043)

GROUP : 1043- 26 , DELO RO-10

TWP : PEIORO
Survey : Compilation
Date : August, 1981

SCALE : 1 = 14 mile

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

Only two outcorps were found inside the claims area; a basalt outcrop in the extreme south west corner and an intermediate tuff outcrop on the extreme northern boundary. Outcrop mapped just north of the claims indicates that the area is underlain by intermediate tuffs which become increasingly interbedded with sediments and iron formations to the north.

Interpretation of the 1979 airborne magnetic survey data indicates that two major volcanic cycles of the Deloro Group may underlay the claims. The first cycle underlies the southern claims area and consists of a basal basalt unit of high magnetic expression which is overlain by a intermediate to felsic volcanic and/or a sedimentary unit of lower magnetic expression. The base of the second cycle is represented by relatively high magnetic response mafic volcanics located across the central claims area. These are overlain to the north by intermediate tuffs grading to interbedded tuffs and sediments of lower magnetic response and by end of cycle, iron formation and associated sediments of very high magnetic response.

CONCLUSIONS AND RECOMMENDATIONS

The property 1043-26 is interpreted as being underlain

by two volcanic cycles of the Upper Deloro Group. No geophysical conductors or geological anomalies exist on this property, therefore, it is recommended that no further work be done at this time.

Timmins, Ontario October, 1981 P. Lickley

APPENDIX A

SCHEDULE OF CLAIMS

DELORO-10

PROJECT 1043-26

Claim Group	Township	Number	Claim Numbers	Recording Date
1043-26	Deloro	11	P-596283	January 29, 1981
Deloro			P-596284	January 29, 1981
			P-596285	January 29, 1981
			P-596286	January 29, 1981
			P-596287	January 29, 1981
			P-596288	January 29, 1981
			P-596289	January 29, 1981
			P-596290	January 29, 1981
•			P-596291	January 29, 1981
			P-596292	January 29, 1981
			P-596293	January 29, 1981





2A06NW0140 2.4342 DELORO

900

to be attached as an appendix to technical report pacts shown here need not be repeated in report technical report must contain interpretation, conclusions etc.

Type of Survey(s) <u>Geological Survey</u> Township or Area <u>Deloro</u> Claim Holder(s) <u>Amax of Canada Limited</u>	MINING CLAIMS TRAVERSED List numerically	
Survey Company Amax Minerals Exploration . Author of Report Peter Lickley .	(prefix) P	(number) 596283
Address of Author 255 Algonquin Blvd. West. Timmins. Ont. Covering Dates of Survey May and June 1981 (linecutting to office) Total Miles of Line Cut	P P	596284 5 96285
SPECIAL PROVISIONS DAYS	Р Р	596286 <u>596287 </u>
CREDITS REQUESTED Geophysical —Electromagnetic ENTER 40 days (includes line cutting) for first Survey. —Radiometric —Radiometric	P P	596288 / 596289
survey. —Radiometric————————————————————————————————————	P P	596290 / 596291 / 596292 /
MagnetometerElectromagneticRadiometric (enter days per claim)	Р	596293 /
DATE: 11/27/81 SIGNATURE: Author of Report or Agent		
Res. Geol. Qualifications 2.3797 Previous Surveys		
File No. Type Date Claim Holder		
	TOTAL CLAIMS_	11

Report of Work Instructions: -(Geophysical, Geological, - If number of mining claims traversed exceeds space on this form, attach a list. Geochemical and Expenditures) Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns. 1043-26 Type of Survey(s) Do not use shaded areas below. Township or Area Geological Survey Deloro Claim Holder(s) Prospector's Licence No. Amax of Canada Limited A-38495 Survey Company Survey Dates (linecutting to office) Amax Minerals Exploration Total Miles of line Cut Day | 05. | 81. | Day | 06. | 81 Name and Address of Author (of Geo-Technical report) Peter Lickley, 255 Algonquin Blvd. West, Timmins, Ontario. P4N 2R8 Special Provisions Credits Requested Mining Claims Traversed (List in numerical sequence Geophysical Days per Claim Mining Claim Expend. Days Cr. Mining Claim Prefix Expend. Number For first survey: Number - Electromagnetic Enter 40 days. (This 596283 20 includes line cutting) Magnetometer 596284 20 For each additional survey: - Radiometric using the same grid: <u>59</u>6285 20 Other Enter 20 days (for each) 596286 20 Geological 20 596287 20 Geochemical 596288 20 Man Days Instructions 596289 Days per Claim 20 Geophysical Complete reverse side 596290 20 - Electromagnetic and enter total(s) here 596291 20 - Magnetometer 596292 20 - Radiometric <u>596293</u> 20 - Other Geological Geochemical Airborne Credits Days per Claim Note: Special provisions credits do not apply Electromagnetic to Airborne Surveys. Magnetometer Radiometric Expenditures (excludes power stripping) Type of Work Performed PORCUPINE MINING DIVISION Performed on Claim(s) NOV 3 0 1981 Calculation of Expanditure Days Credits 11 10 1, 9 9 Total Market Days Credits Nov \$ 15 Total number of mining Total Days Credits may be apportioned at the claim holder's claims covered by this choice. Enter number of days credits per claim selected report of work. For Office Use Only in columns at right. r. Date Recorded Report Completed Date of Report Recorded Holder or Agent (Signature) Hoseman 1981 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, Ont. P4N 2R8

Date Certifled

Certified by (Signature)

Mac Palesar

1593 (81/10)

December 7, 1981

2.4342

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.596283 et al, in the Township of Deloro.

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

Yours veryttruly,

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



255 Algonquin Blvd. West Timmins, Ontario P4N 2R8

Telephone: (705) 264-5247

Our File: 1043-26

November 27, 1981

RECEIVED

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

MINING LANDS SECTION

DEC 1 - 1981

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 claims located in Deloro township, along with their respective survey plans.

P-596283	P-59628 4	P-596285	P-596286
P-596287	P-596288	P-596289	P-596290
P-596291	P-596292	P-596293	

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

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,

Moseman

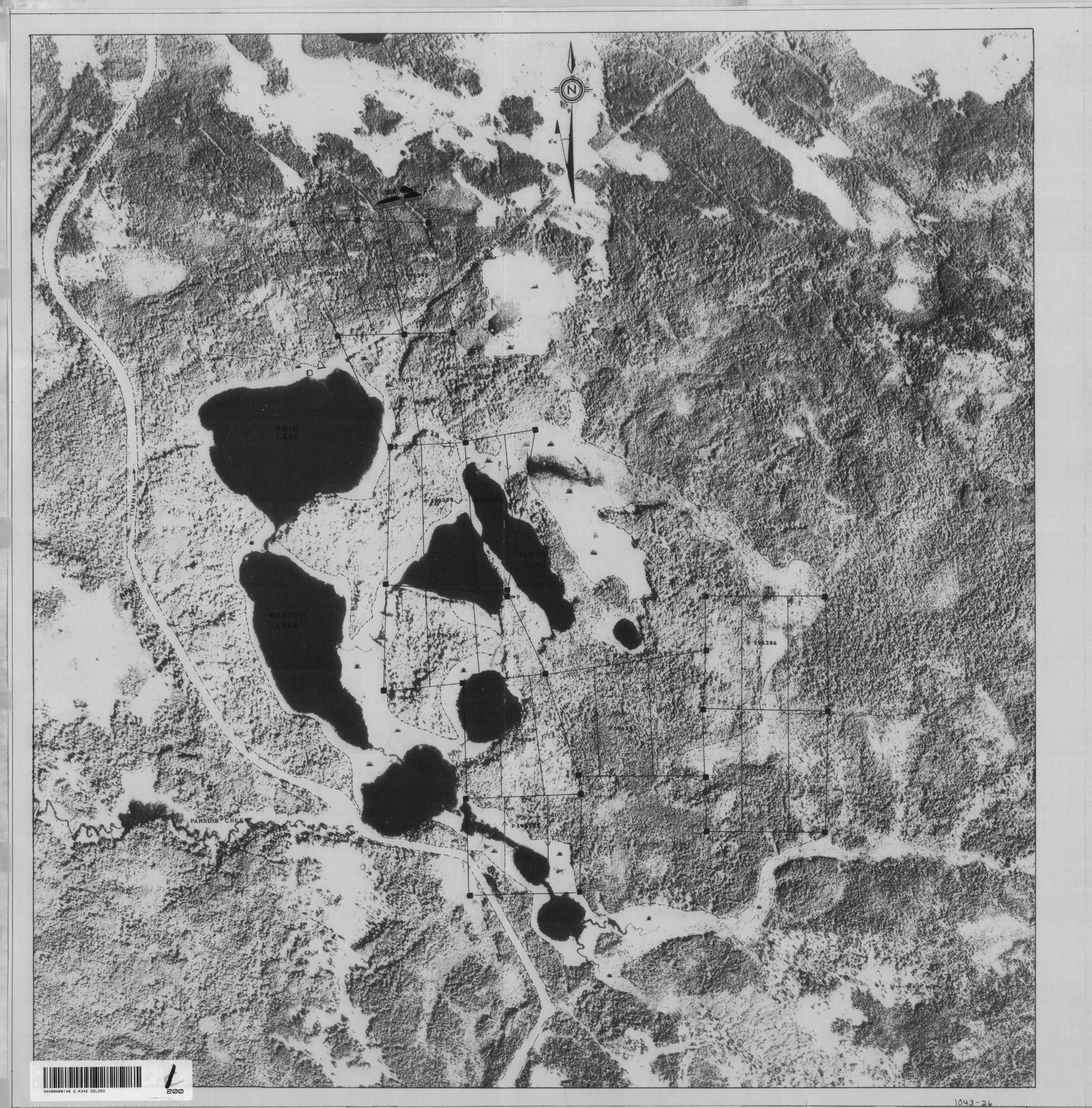
AMAX OF CANADA LIMITED

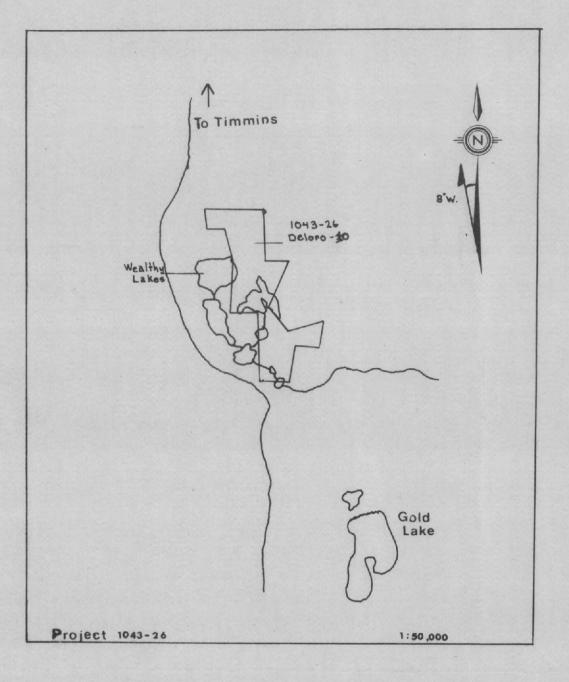
Rosemary Littley (Mrs.)

Land Recorder

Encs. 2

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





INTERMEDIATE TUFF

UNDIFFERENTIATED SEDIMENTS

IRON FORMATION

SYMBOLS

Foliation - inclined dip -dip unknown

Swamp

Bedding - inclined dip Outcrop Boundary

Claim post

Claim post location

Witness post

Traverse line (direction indicated)

Gravel road Bush road Slash Boundary

AMAX MINERALS EXPLORATION

Geology Survey

DELORO - 10, 1043 - 26 Deloro Township District of Cochrane

Scale 1:5000

NTS 42/A/6 Timmins Office To Accompany Report by:

Date : Aug. 4/81 Mapped by : J. MacPherson