

2.4347



42A06NW0214 2.4347 OGDEN

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REPORT ON A GEOLOGICAL SURVEY

RECEIVED

DEC 1 - 1981

MINING LANDS SECTION

OGDEN-9

PROJECT 1043-22

NTS: 42-A-6

AMAX MINERALS EXPLORATION

Timmins, Ontario
October, 1981

J. MacPherson
Geologist

SUMMARY

During May of 1981, a detailed geological survey was carried out on a group of four (4) claims in east central Ogden township, District of Cochrane, Ontario.

The property is underlain by felsic to intermediate flows with interflow sediments of the Upper Deloro Group. A barren shear zone trends east-west across the central part of the property. Assessment files indicate there is a 100 foot deep shaft in the south west corner of P-597230.

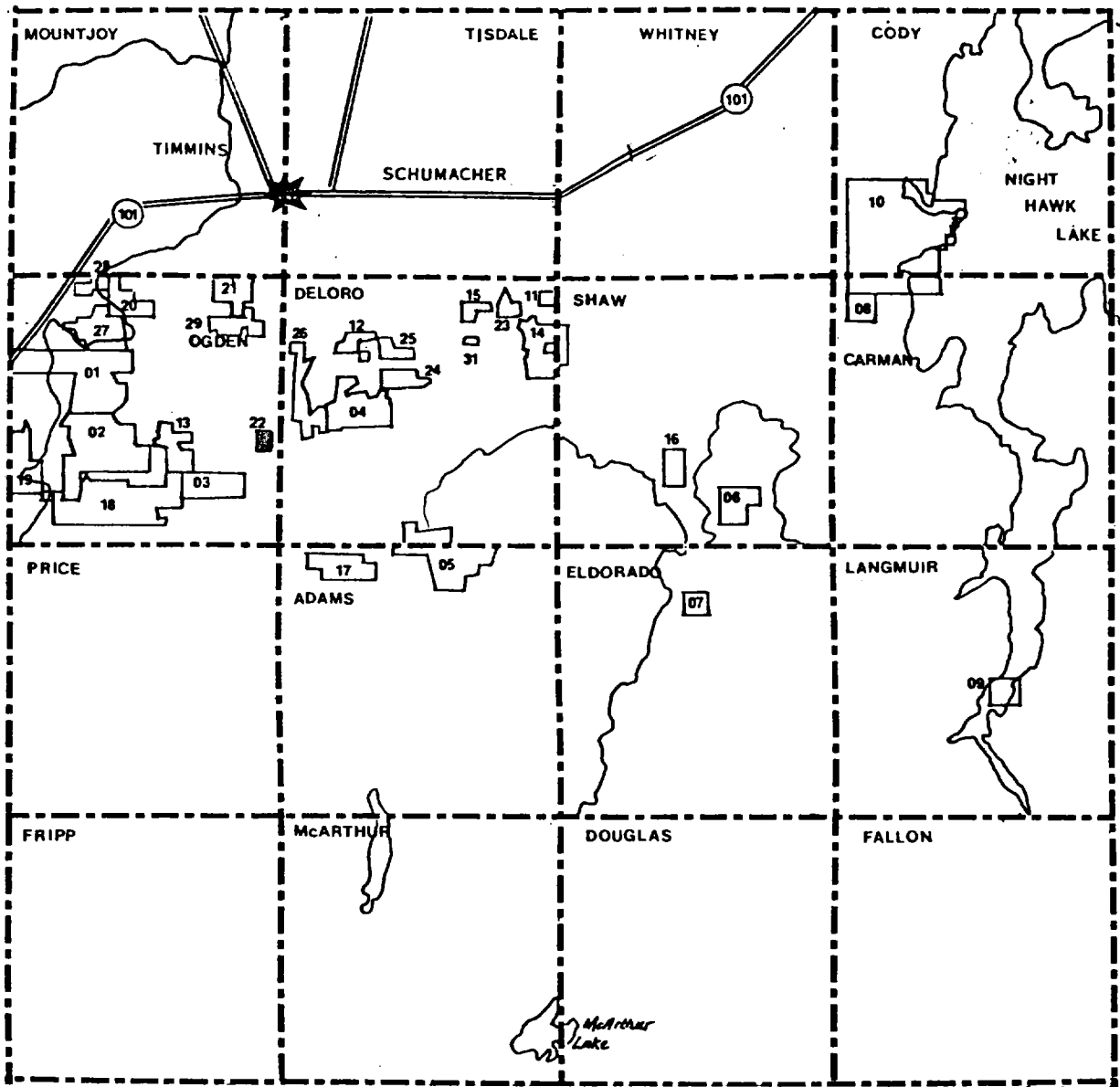
All assays on the property returned nil to trace gold values.

It is recommended that the old shaft be located and the dump be sampled. If there are no values found in this area, the property holds no further interest and should be dropped.

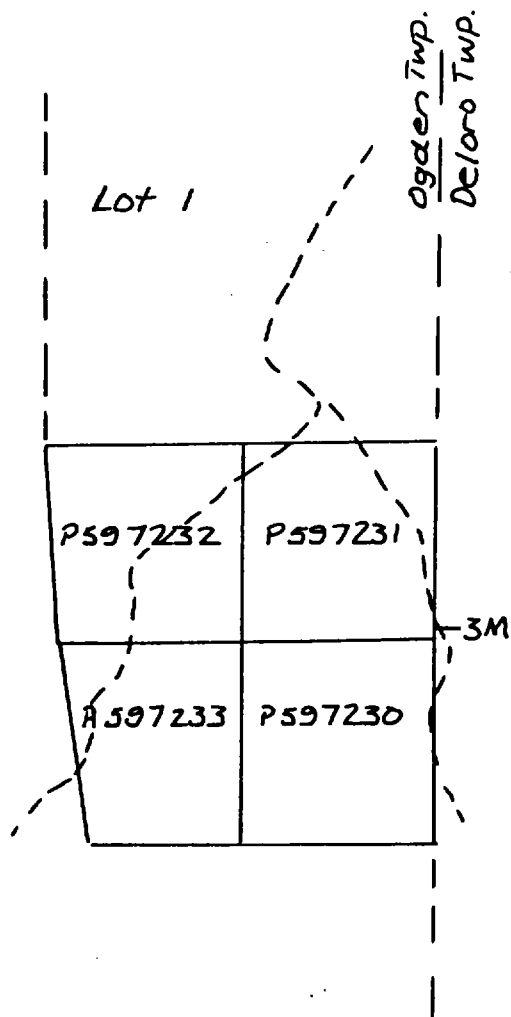
INTRODUCTION

During May, 1981, a detailed geological survey was carried out on a group of four (4) claims located in east central Ogden township, adjacent to the Deloro township boundary. The claim numbers are P-597230 - 33 inclusive and are recorded in the name of Amax of Canada Limited.

The claims cover an area of geology favourable to gold mineralization, containing quartz veins in wide shear zones trending east-west.



LOCATION MAP
Project 1043-22
OGDEN-9
1" = 4 miles



CLAIM MAP
Project 1043-22
OGDEN-9
Ogden: Township
1" = $\frac{1}{4}$ mile

LOCATION AND ACCESS

This group is located in east central Ogden township adjacent to the Deloro-Ogden township boundary, in the District of Cochrane, Ontario.

The property is easily accessible via Pine Street South from Timmins. About four kilometres south along this road from Timmins, a gravel road leads west and cuts directly through the property.

TOPOGRAPHY AND RESOURCES

The relief on the property is low. The land slopes gently to the east and there is a low outcrop ridge running north-south along the western edge of the property.

The area has largely been slashed out over the last few years. Secondary vegetation along with the odd birch and poplar are all that remains of the vegetation.

The nearest source of water, Smith Lake, lies one kilometre north west of the property.

PREVIOUS WORK

From Assessment Files

Goshawk Mines Limited apparently drilled one hole in

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

the south west corner of the present Amax claim P-597230. They also report a shaft in the same area, about 100 feet deep. The drill log indicates that they encountered mainly felsic volcanic flows and tuff, cut by a shear zone about 50 feet wide. No assay data is available.

Observed in the Field

Two small trenches were found on narrow bands of iron formation which were located near a major east-west trending shear zone situated in the central part of the claims.

The old shaft and drill hole were not located during the present survey.

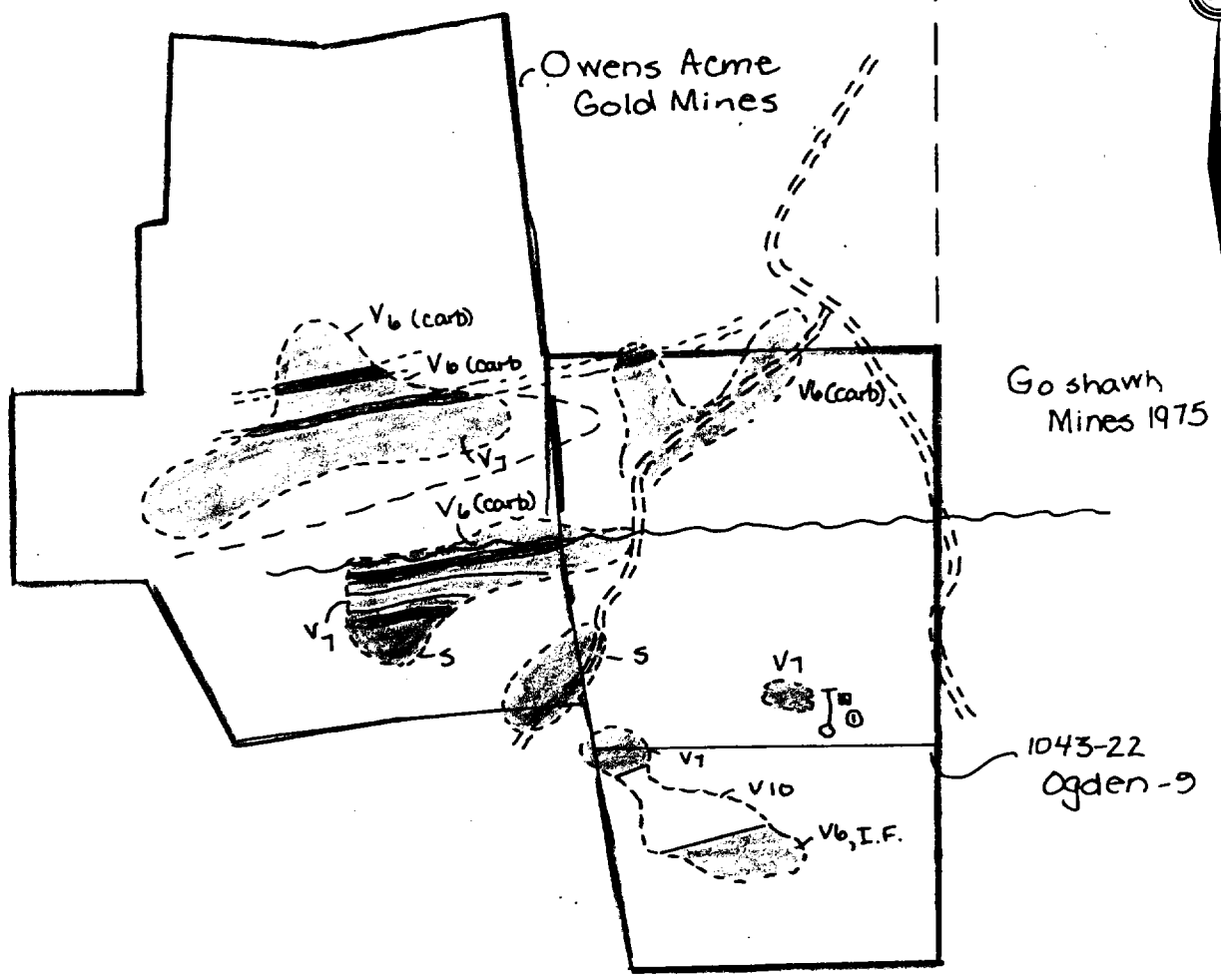
SURVEY METHOD

The survey was performed by J. MacPherson and A. Plackitt during late May, 1981. Air photo blow-ups at a scale of 1:5,000 were used as control for the geology survey.

Traverse lines at 400 foot intervals using pace and compass were used to survey the interior of the claims.

REGIONAL GEOLOGY

The volcanic rocks of the Timmins area consist of the



Note: See geology map in back pocket for more detailed geological information.

LEGEND

- V6 (carb) Carbonatized andesite
- V7 Basalt
- V10 Agglomerate
- I.F. Iron Formation
- S Undifferentiated Sediments
- Shear Zone
- Geological contact-observed
- Geological contact-interpreted
- Outcrop Boundary
- Shaft
- Drill Hole

AMAX MINERALS EXPLORATION

PROJECT : DELORO (1043)
 GROUP : 1043-22, Ogden-9
 TWP : Ogden
 Survey : Compilation
 Date : August, 1981
 SCALE : 1" = 1/4 mile

{ Goshawk Mines 1975
 { Tuff, Dacite, Por., Rhy.

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. Oxide iron formation appears to be a good marker horizon which can 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 characterized by serpentinized ultramafic flows.

The Porcupine-Destor 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

The geology of the property consists of felsic and intermediate volcanic flows, with interflow tuffs and sediments, including iron formation.

The volcanic rocks are mainly dacite and andesite. There is a grading from felsic to intermediate from south to north. The volcanics are medium to fine-grained and are light green to grey in colour.

The interflow sediments are generally undifferentiated, although some greywacke was located. The iron formation is located at the top of the volcanic cycle and indicates the beginning of the next cycle of volcanism. It may or may not be accompanied by other sediments.

There is a major east-west trending shear zone

present in the central part of the property. It is about 25 to 30 feet wide and appears to follow a volcanic/iron formation contact. The shear is pyritized and carbonatized and contains one large quartz vein about two feet wide. The vein was barren of any mineralization, most of the pyrite being confined to the shear around the vein. Assays of all rock, ie vein, wallrock and overlying sediments, underlying volcanics all returned nil to trace values of gold.

The rocks are generally strongly foliated. The trend is east-west and the dip is essentially vertical.

CONCLUSIONS AND RECOMMENDATIONS

The geology of the property consists mainly of felsic to intermediate volcanics with interflow tuff and sediments, including iron formation. A barren east-west trending shear zone was also located.

It is recommended that the old shaft be located and the dump, if any, be sampled. If this does not produce results, the property should be dropped.

Timmins, Ontario
October, 1981


J. MacPherson
Geologist

APPENDIX A

SCHEDULE OF CLAIMS

OGDEN-9

PROJECT 1043-22

<u>Claim Group</u>	<u>Township</u>	<u>Number</u>	<u>Claim Numbers</u>	<u>Recording Date</u>
1043-22	Ogden	4	P-597230	January 29, 1981
Ogden-9			P-597231	January 29, 1981
			P-597232	January 29, 1981
			P-597233	January 29, 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



Ministry of
Natural
Resources

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

Ogden T. 488



42A06NW0214 2.4347 OGDEN

P-59-30

1043-22

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Type of Survey(s) Geological Survey		Township or Area Ogden Township	
Claim Holder(s) Amax of Canada Limited		Prospector's Licence No. A-38495	
Survey Company Amax Minerals Exploration		Survey Dates (linecutting to office) Day 05 Mo. 81 Yr.	
Name and Address of Author (of Geo-Technical report) Joseph 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)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	597230	20			
	597231	20			
	597232	20			
	597233	20			

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.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed
NOV 27 1981

Performed on Claim(s)
AM 1981 11 27 1981

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.

Report Completed

Date of Report: **Nov. 25, 1981**

Recorded Holder or Agent (Signature): *Rosemary Kitley*

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

RECORDED
NOV 27 1981
Receipt No.

Total number of mining claims covered by this report of work. **4**

For Office Use Only

Total Days Cr. Recorded: **80**

Date Recorded: **Nov. 27/81**

Mining Recorder: *[Signature]*

Date Approved as Recorded: **June 16, 1982**

Regional Branch Director: *[Signature]*



Ministry of Natural Resources
GEOCHEMICAL – GEOLOGICAL – GEOCHEMICAL
TECHNICAL DATA STATEMENT

File _____

**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.**

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 _____ tests

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

Mesh size of fraction used for analysis _____

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 _____

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 May 1981
 (linecutting to office)

Total Miles of Line Cut _____

**SPECIAL PROVISIONS
 CREDITS REQUESTED**

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 20
 Geochemical _____

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

Magnetometer _____ Electromagnetic _____ Radiometric _____
 (enter days per claim)

DATE: 11/25/81 SIGNATURE: J MacPherson
 Author of Report or Agent

Res. Geol. _____ Qualifications 23797

Previous Surveys

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

MINING CLAIMS TRAVERSED
 List numerically

_____ (prefix) _____ (number)
 P 597230

_____ P 597231

_____ P 597232

_____ P 597233

TOTAL CLAIMS 4

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 _____

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

MAGNETIC

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

ELECTROMAGNETIC

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

GRAVITY

Elevation accuracy _____
Instrument _____
Method Time Domain Frequency Domain
Parameters - On time _____ Frequency _____
- Off time _____ Range _____
- Delay time _____
- Integration time _____

INDUCED POLARIZATION

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 _____



Mining Lands Comments

To: Geophysics

Comments

Approved Wish to see again with corrections

Date

Signature

To: Geology - Expenditures

Mr. Kustra

Comments

Approved Wish to see again with corrections

Date

May 14/82

Signature

Kustra

To: Geochemistry

Comments

Approved Wish to see again with corrections

Date

Signature

Handwritten mark resembling a stylized 'V' or 'D' with a slash through it.

December 14, 1981

2.4347

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.597230 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



MINERALS EXPLORATION
(A Division of AMAX OF CANADA LIMITED)

255 Algonquin Blvd. West
Timmins, Ontario
P4N 2R8

Telephone: (705) 264-5247

Our File: 1043-22

November 25, 1981

RECEIVED

DEC 1 - 1981

MINING LANDS SECTION

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

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 Ogden township, along with their respective survey plans.

P-597230

P-597231

P-597232

P-597233

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

Thank you.

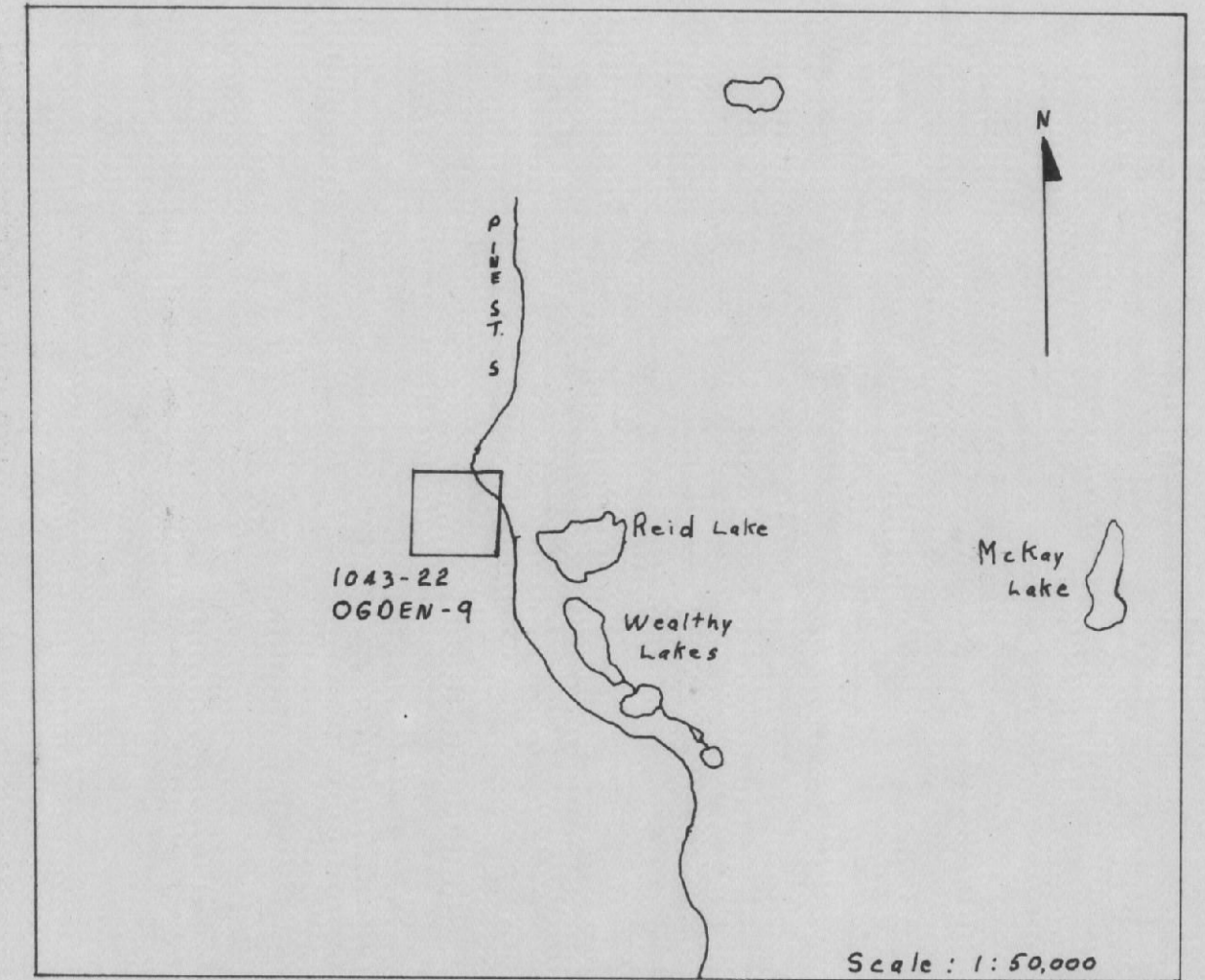
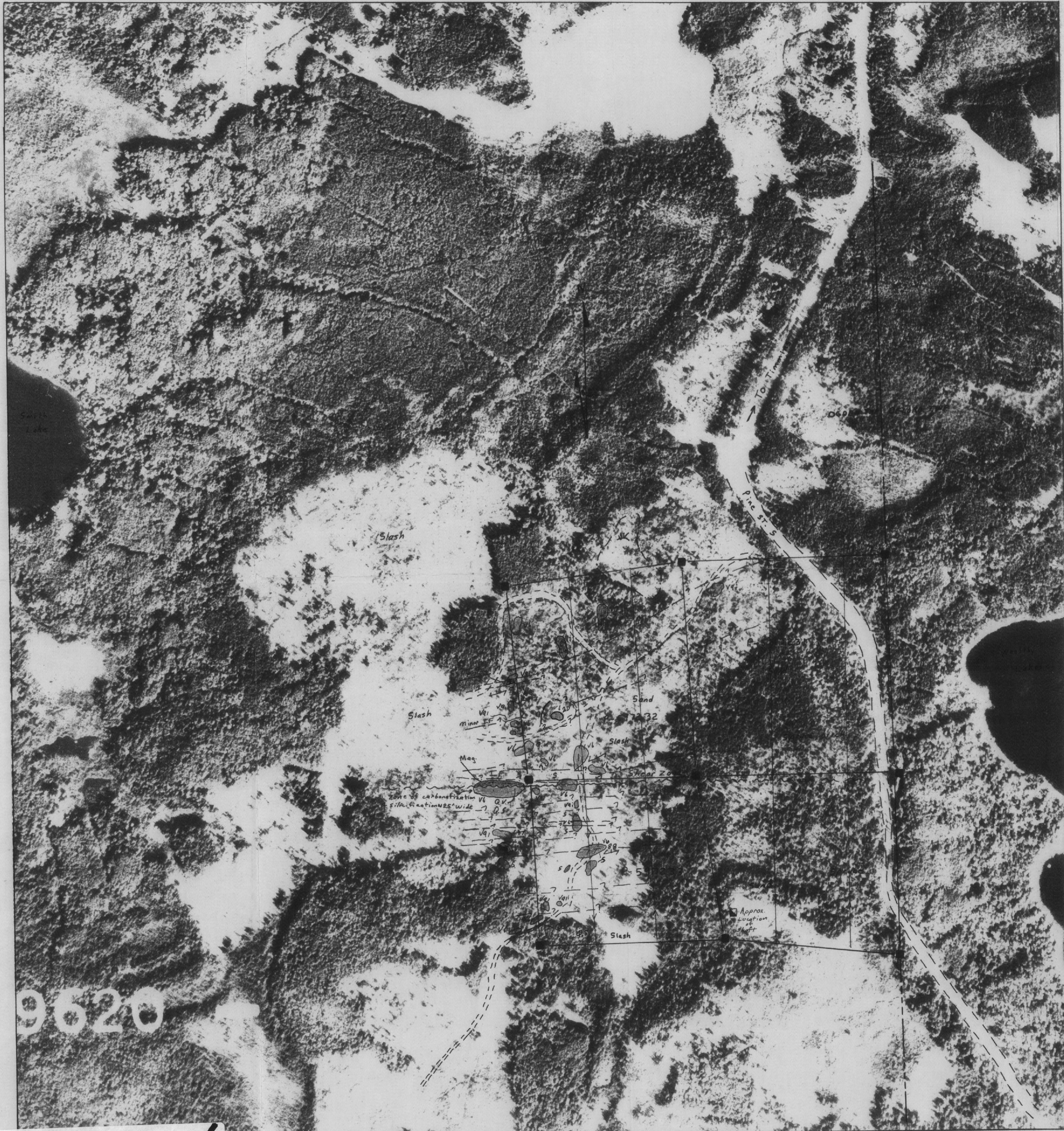
Yours truly,

AMAX OF CANADA LIMITED

Rosemary Tittley (Mrs.)
Land Recorder

Encs. 2

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



INDEX MAP

LEGEND

Volcanic Rocks

- V6 Andesite
- V7 Basalt
- V9i Intermediate Tuff

Sedimentary Rocks

- S Undifferentiated Sediments
- IF Iron Formation

Intrusive Rocks

- 2D Diorite

SYMBOLS

- Mag Magnetite
- Q.V. Quartz vein
- Q.S. Quartz stringer zone
- mm Shear zone (location known)
- mmm Shear zone (location interpreted)
- ↘ Foliation - Inclined dip
- ⊥ - Vertical dip
- - - Geological contact (interpreted)
- Outcrop boundary
- X Trench
- Shaft
- Claim post located
- Traverse Line
- (W) Swamp
- Gravel road
- - - Bush road

AMAX MINERALS EXPLORATION
 GEOLOGICAL SURVEY
 Ogden-9, 1043-22
 Ogden Township
 District of Cochrane
 Scale 1:5000

NTS 42-A-6
 To Accompany Report by J. MacPherson

May 1981
 Timmins Office

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