



42A06SW0027 2.4316 ADAMS

REPORT ON A GEOLOGICAL SURVEY

010
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NOV 23 1981

MINING LANDS SECTION

ADAMS-2

PROJECT 1043-17

NTS: 42-A-6

AMAX MINERALS EXPLORATION

Timmins, Ontario
October, 1981

J. MacPherson
Geologist

SUMMARY

A detail geological survey was carried out in June of 1981 on a group of eleven (11) claims located in north central Adams township, District of Cochrane, Ontario.

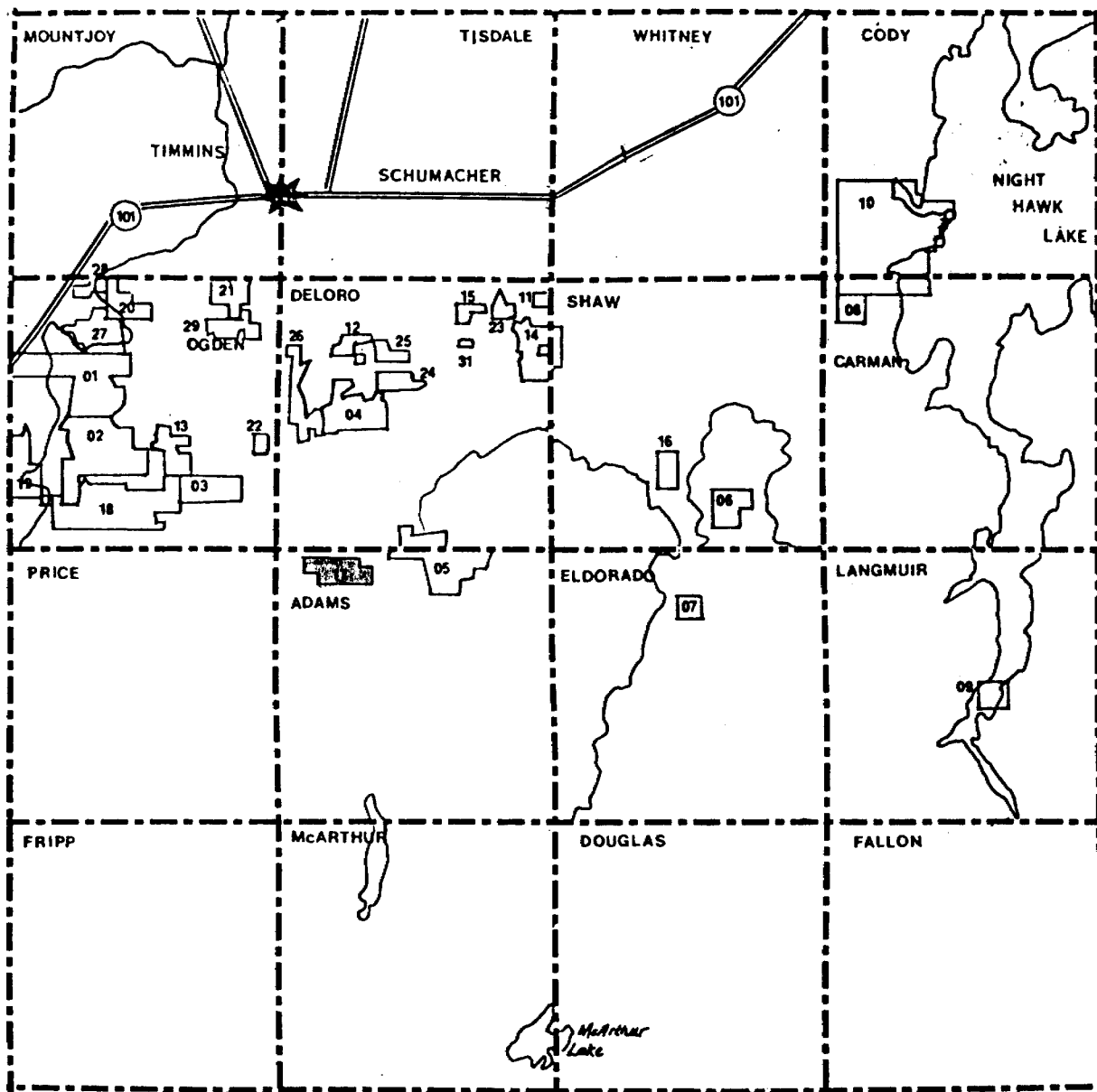
No outcrop was found. From previous drilling, the area is underlain by an assemblage of mafic volcanic rocks intruded by two felsic stocks. Feeder dykes from these stocks appear to run in a north-east trending shear zone and are reported to carry gold averaging between 0.02 and 0.1 ounces per ton. These values are based on the previous drilling carried out by Balmoral Porcupine Mines during 1945-46.

It is recommended that the shear zone be tested by re-drilling one or more of the Balmoral Porcupine holes.

INTRODUCTION

During mid-June, 1981, a detailed geological survey was carried out on a group of eleven (11) claims located in north central Adams township. The claim numbers are P-567021-23,568902-08, and P-610860. These claims are recorded under the name of Amax of Canada Limited.

There are no airborne conductors present on the property. Preliminary work in the form of geophysical surveys (magnetometer, VLF) were carried out on the property in order to locate a possible gold-bearing shear zone.



LOCATION MAP
Project 1043-17

ADAMS-2
1" = 4 miles

LOCATION AND ACCESS

This group of eleven (11) claims is located in the north central part of Adams township in the District of Cochrane, Ontario.

The property is about twelve kilometres due south of Timmins, Ontario. It can be reached by a good gravel road leading south from the city, and then east to a major powerline. About 200 metres north along the powerline, a gravel road runs due east to the property.

TOPOGRAPHY AND RESOURCES

The relief on the property is low. The property slopes gradually away to the east and south into cedar and alder swamp.

Vegetation consists of poplar and spruce on the higher central sand ridge, and scattered spruce with alders and cedars in the lower lying areas.

The only source of water is located beside a shaft collar on L0/0+25N and would be adequate for a diamond drill program.

PREVIOUS WORK

From Assessment Files

The property was worked during 1945-46 by Balmoral Porcupine Mines Limited. A total of 19,000 feet (5800 metres)

Deloro Twp.
Adams Twp.

3M

2 1/2 M

P567021	P567022	P567023	
P568905	P568904	P568903	P568902
P610860	P568906	P568907	P568908

H. E. P. C.

5M

Mounjoy Elec



CLAIM MAP
Project 1043-17
ADAMS-2
Adams Township
1" = 1/4 mile

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

was drilled on the property, outlining a north-east trending shear zone in mafic metavolcanics. Most values of gold intersected were between 0.02 and 0.1 ounces per ton with a few scattered higher values up to 0.75 ounces per ton. Assessment files indicate a shaft collar was constructed although no shaft sinking was done.

Observed in Field

The shaft collar reported in the assessment files was located at L0/0+25N. Several old drill set-ups were also located on the grid lines. Remnants of a number of old camp buildings were also found on the property.

SURVEY METHOD

The survey was performed by J. MacPherson, P. Lickley, D. Messenger and A. Plackitt during mid-June, 1981. Air photo blow-ups at a scale of 1:5,000 and the Amax detail geophysical grid were used as control for the geology survey.

Off the grid, the remainder of the property was surveyed using pace and compass traverse lines at 400 foot (125m) intervals.

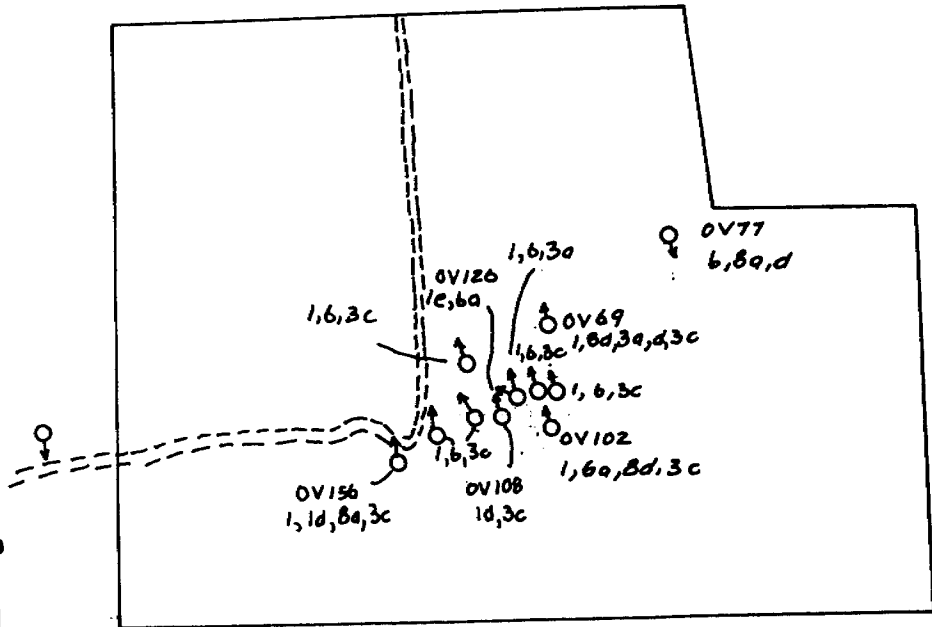
REGIONAL GEOLOGY

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



Deloro Twp.
Adams Twp.

Power line



○ → Drill Holes: Balmoral Porcupine Mines Ltd.,
1937-1945.

LEGEND

- 1 Mafic Metavolcanics
- 1d Massive to foliated flows
- 1e Pillowed flows
- 3 Felsic Metavolcanics
- 3a Ash, lapilli tuff
- 3c Quartz feldspar dykes
- 3d Massive to foliated flow
- 6 Mafic to ultramafic intrusives
- 6a Gabbro, diorite
- 8 Intermediate to felsic intrusives
- 8a Granite
- 8d Syenite

AMAX MINERALS EXPLORATION

PROJECT: DELORO (1043)
 GROUP: 1043-17, Adams-2
 TWP: Adams
 Survey: Compilation
 Date: August, 1981
 SCALE: 1" = 1/4 mile

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 is the 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 marked by serpentinized 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

There is no outcrop on the property. Hence the geology must be interpreted from the old drilling results.

The area is underlain mainly by mafic metavolcanic rocks which appear to have been highly altered, according to the old drill logs. These are intruded by a syenite stock to the north east and a large granite pluton to the south west. Feeder dykes of quartz-feldspar porphyry run off these and it is with these that most of the gold intersections are associated. These appear to follow a north-east trending fault on the property as well, with a lateral displacement of up to 500 metres.

CONCLUSIONS AND RECOMMENDATIONS

Based on old drill results, the gold is associated with

quartz-feldspar porphyry dykes which seem to follow a north-east trending shear zone.

It is recommended that the old drill results be tested by a new drill program. The Balmoral Porcupine hole with the best assays should be re-drilled. Further work on the property would depend on the results of the hole.

Timmins, Ontario
October, 1981

J. A. MacPherson
J. MacPherson
Geologist

APPENDIX A

SCHEDULE OF CLAIMS

ADAMS-2

PROJECT 1043-17

Claim Group	Township	Number	Claim Numbers	Recording Date
1043-17	Adams	11	P-567021	June 5, 1980
Adams-2			P-567022	June 5, 1980
			P-567023	June 5, 1980
			P-568902	June 5, 1980
			P-568903	June 5, 1980
			P-568904	June 5, 1980
			P-568905	June 5, 1980
			P-568906	June 5, 1980
			P-568907	June 5, 1980
			P-568908	June 5, 1980
			P-610860	April 14, 1981



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

Adams Trup.

#477

Instructions: - Please type or print. *2.4316*
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the

P-567021

1043-17

The Mi

Type of Survey(s)

Geological Survey



42A06SW0027 2.4316 ADAMS

900

Claim Holder(s)

Amax of Canada Limited

Survey Company

Amax Minerals Exploration

Survey Dates (linecutting to office)

Total Miles of line Cut

Day | Mo. | Yr. | Day | Mo. | Yr.
06 | 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)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	567021	20			
	567022	20			
	567023	20			
	568902	20			
	568903	20			
	568904	20			
	568905	20			
	568906	20			
	568907	20			
	568908	20			
	610860	20			

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NOV 26 1981

MINING LANDS SECTION

RECORDED

NOV 20 1981

Receipt No.

Airborne Credits

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
Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures ÷ 15 = Total Days Credits

\$ ÷ 15 =

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: November 19, 1981
Recorded Holder or Agent (Signature): Rosemary Ditley

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

Nov. 19/81

Certified by (Signature)

J. A. MacPherson

Total number of mining claims covered by this report of work. **11**

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
<i>220</i>	<i>Nov. 20/81</i>	<i>[Signature]</i>
	Date Approved as Recorded	Regional Branch Director
	<i>June 16, 1982</i>	<i>[Signature]</i>



L.D.

Mining Lands Comments

To: Geophysics

Comments

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

To: Geology - Expenditures *Ma. Kustra*

Comments

<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Wish to see again with corrections	Date <i>March 12/82</i>	Signature <i>C. Kustra</i>

To: Geochemistry

Comments

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

November 27, 1981

2.4316

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.567201 et al, in the Township of Adams.

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

Our File: 1043-17

November 19, 1981

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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 along with their respective survey maps, concerning a geological survey which was carried out over the below listed contiguous mining claims in Adams township.

P-567021	P-567022	P-567023	P-568902
P-568903	P-568904	P-568905	P-568906
P-568907	P-568908	P-610860	

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

RECEIVED
Land Management Branch
MINING DIVISION
NOV 23 1981
E. W. ANDERSON
C. E. BOYTON
W. R. SMITH
W. J. HARRIS
W. J. HARRIS
W. J. HARRIS
W. J. HARRIS

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



**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 Adams

Claim Holder(s) Amax of Canada Limited

Survey Company Amax Minerals Exploration

Author of Report J. MacPherson

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

Covering Dates of Survey June 1981
(linecutting to office)

Total Miles of Line Cut _____

**MINING CLAIMS TRAVERSED
List numerically**

(prefix)	(number)
P	567021 .
P	567022 .
P	567023 .
P	568902 .
P	568903 .
P	568904 .
P	568905 .
P	568906 .
P	568907 .
P	568908 .
P	610860 .

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 20
- Geochemical _____

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

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

DATE: November 19, 1981 SIGNATURE: J. A. MacPherson
Author of Report or Agent

Res. Geol. _____ Qualifications 2.3797

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

TOTAL CLAIMS 11

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 _____

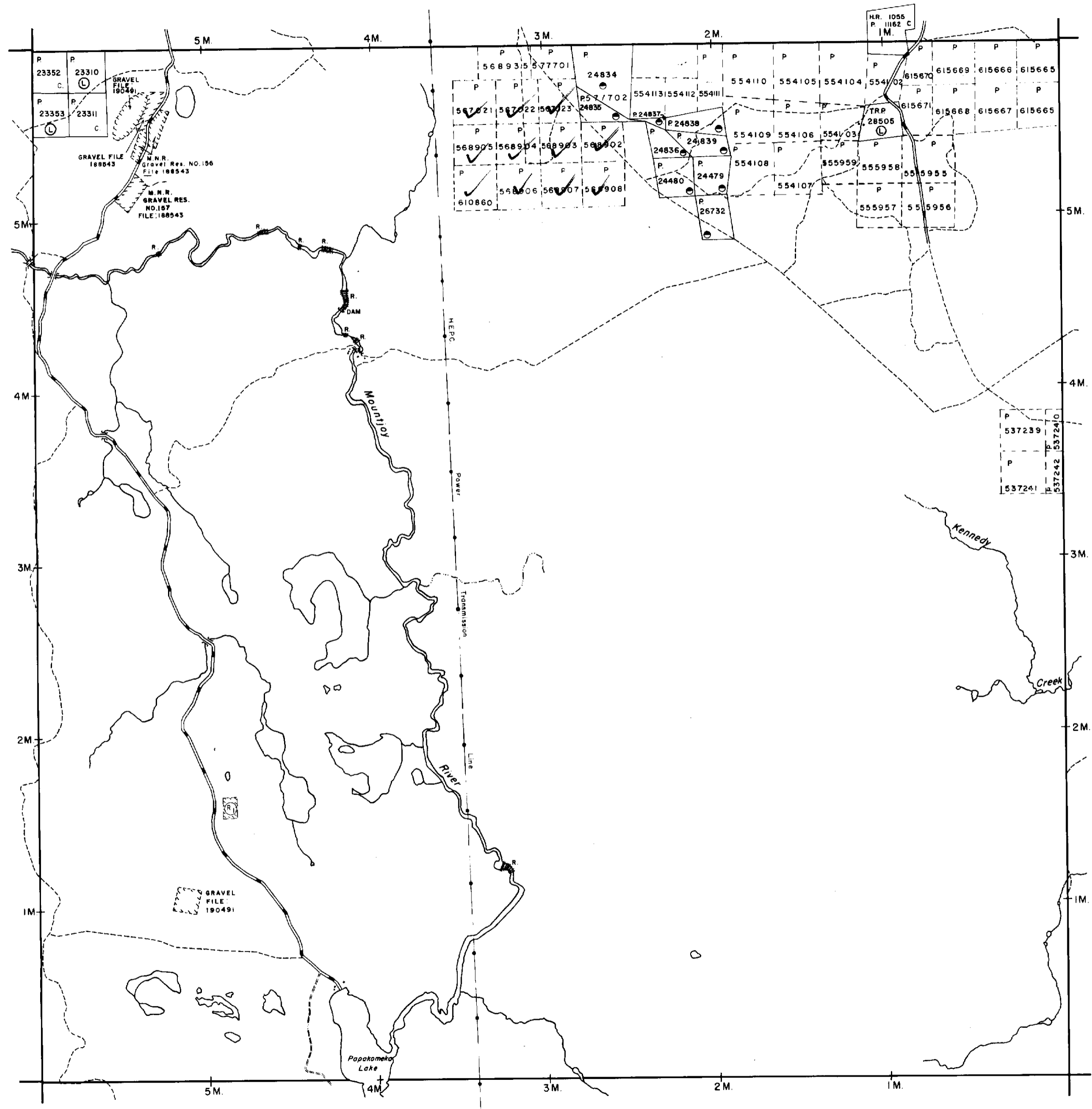
Base station value and location _____

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 _____

Deloro Twp. - M.272



Price Twp. - M.307

Eldorado Twp. - M.276

McArthur Twp. - M.298

THE TOWNSHIP OF

ADAMS

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- 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 C.

NOTES

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

This township lies within the Municipality of CITY of TIMMINS.

Areas withdrawn from staking under Section 43 of the Mining Act, R.S.O. 1970.

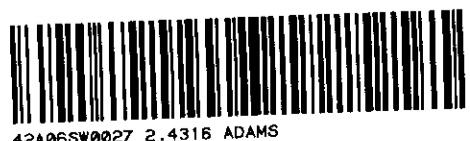
Order No.	File	Date	Disposition
W.25/77	188543	11/3/77	S.R.O.

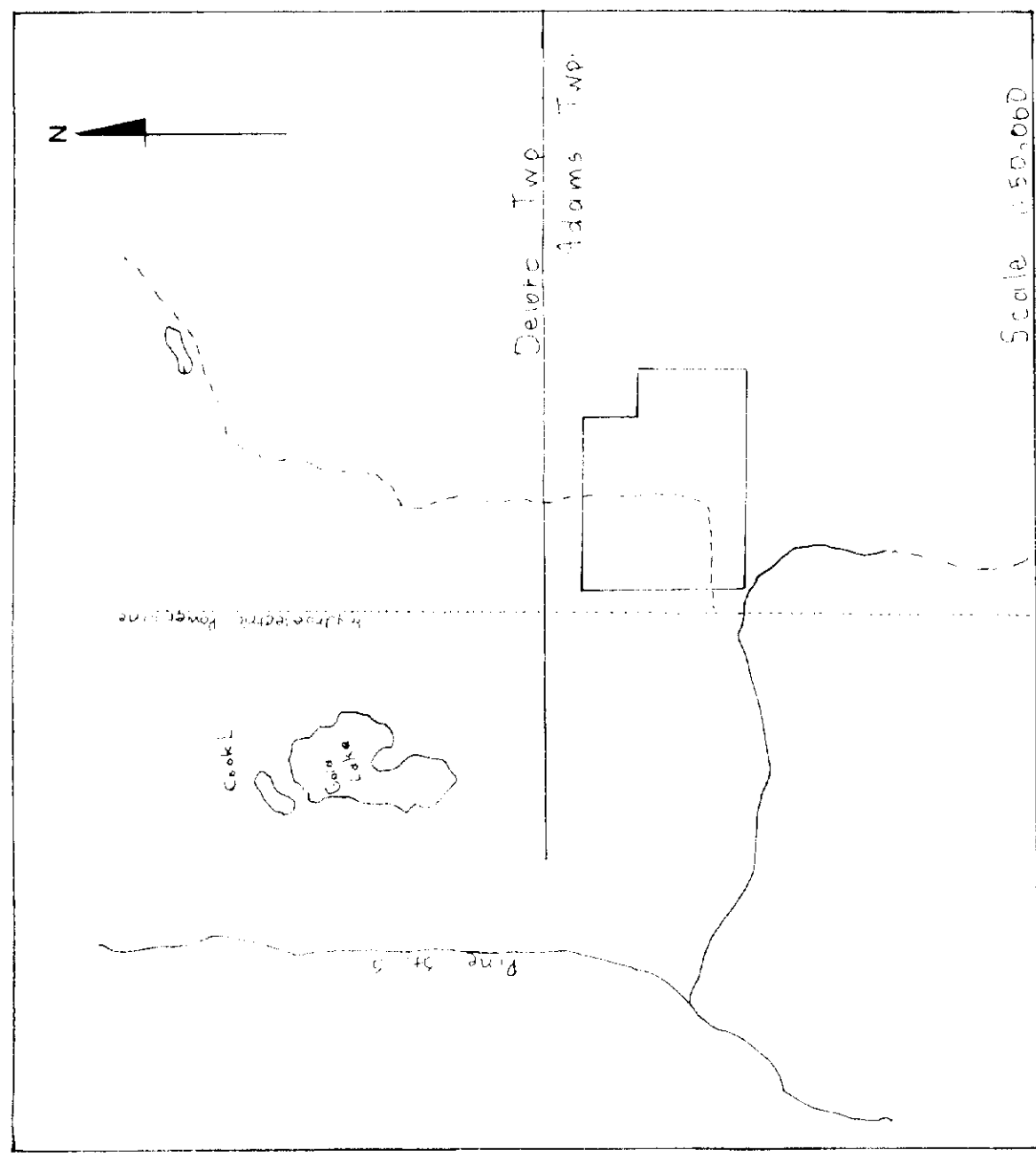
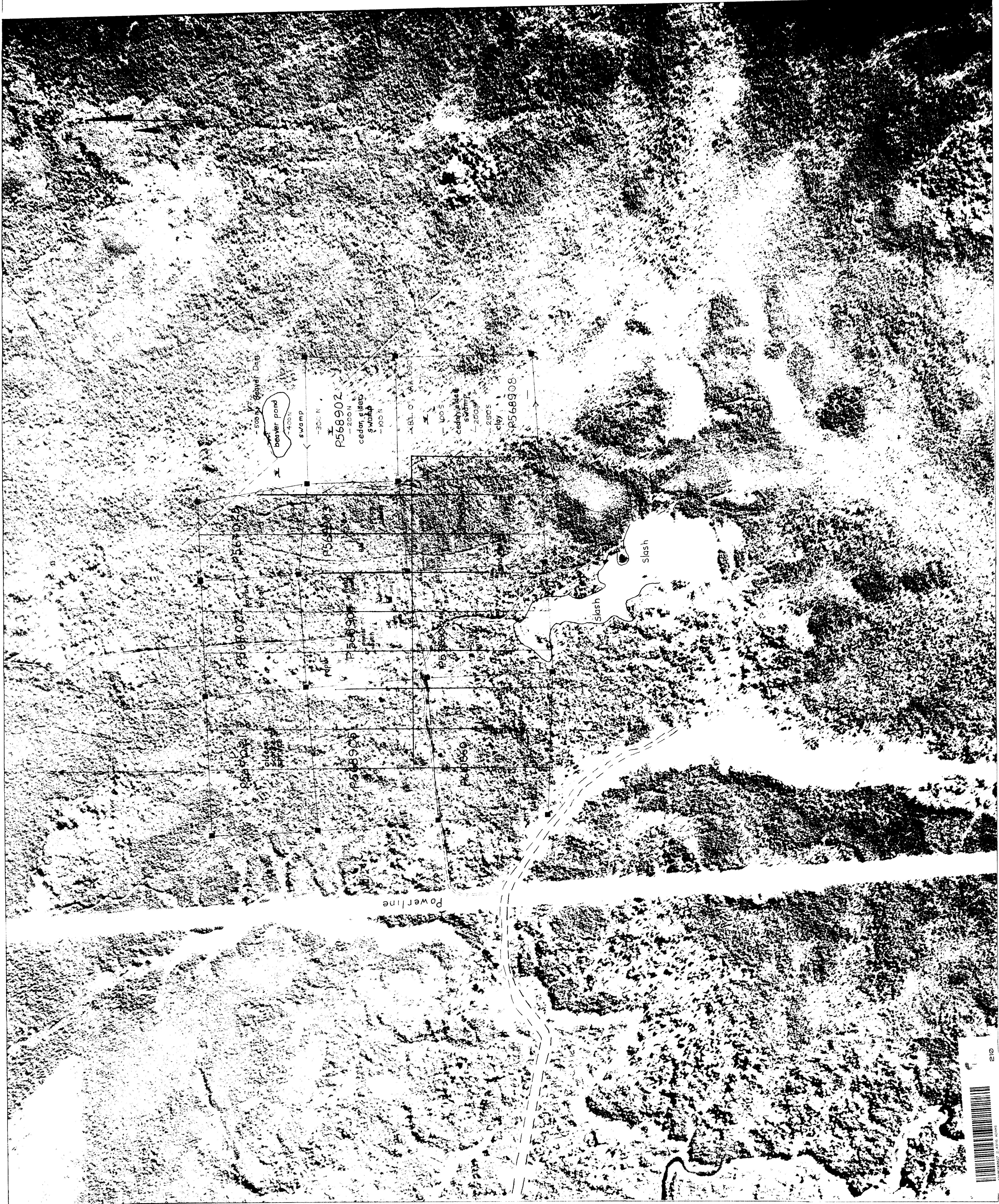
DATE OF ISSUE
MAR 10 1982
 Ministry of Natural Resources
 TORONTO

2.4316

PLAN NO. **M.261**

ONTARIO
 MINISTRY OF NATURAL RESOURCES
 SURVEYS AND MAPPING BRANCH





INDEX MAP

SYMBOLS

- OLD CLAIM POST LOCATED
- CLAIM POST LOCATED
- POSSIBLE DRILL SITE (BALMORAL PORCUPINE MINES '84)
- GRID LINE
- TRAVELER LINE
- ▲ OLD SHAFT COLLAR
- ⊖ SWAMP
- ⊙ BEAVER POND
- GRAVEL ROAD
- BUSH ROAD

* NOTE: NO OUTCROP LOCATED

AMAX MINERALS EXPLORATION

GEOLOGICAL SURVEY

ADAMS 2 1043-17

Adams Exp.

District of Cochrane

SCALE: 1:50,000

NTS: 42-A-2
 by Accompanying Report of M. J. ...
 June 1981
 ... Office

