



42A03NE0031 2.5223 MCARTHUR

010

REPORT ON A GEOLOGICAL SURVEY

RECEIVED

NOV 25 1982

MINING LANDS SECTION

MAC-4

PRICE 035-07

NTS: 42-A-3/6

AMAX MINERALS EXPLORATION

Timmins, Ontario
August, 1982

S. Davies



42A03NE0031 2.5223 MCARTHUR

T A B L E O F C

010C

	<u>Page</u>
SUMMARY	1
INTRODUCTION	2
LOCATION AND ACCESS	2
TOPOGRAPHY AND RESOURCES	2
PREVIOUS WORK	
From Assessment Files	3
Found In Field	3
SURVEY METHOD	3
REGIONAL GEOLOGY	4
PROPERTY GEOLOGY	5
CONCLUSIONS AND RECOMMENDATIONS	5

LIST OF FIGURES

FIGURE 1	LOCATION SKETCH	After Page 2
FIGURE 2	COMPILATION SKETCH	After Page 4
FIGURE 3	CLAIM SKETCH	After Page 6

LIST OF TABLES

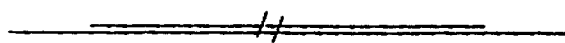
TABLE 1	TABLE OF FORMATIONS	After Page 4
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LIST OF APPENDICES

APPENDIX A	SCHEDULE OF CLAIMS	After Page 6
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LIST OF MAPS

MAP 1	GEOLOGICAL SURVEY MAP	Back Pocket
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SUMMARY

During July of 1982, a geological survey was performed on four (4) claims in south central McArthur township, District of Timiskaming, Ontario.

The property is underlain by mafic metavolcanics which are intruded by a north-west trending quartz-diorite dyke.

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

INTRODUCTION

A detailed geological survey was carried out on a group of four (4) claims in McArthur township during July of 1982. The claim numbers are P-618850-53 and are recorded in the name of Amax of Canada Limited.

The property is located on the contact between quartz-diorite and mafic metavolcanics.

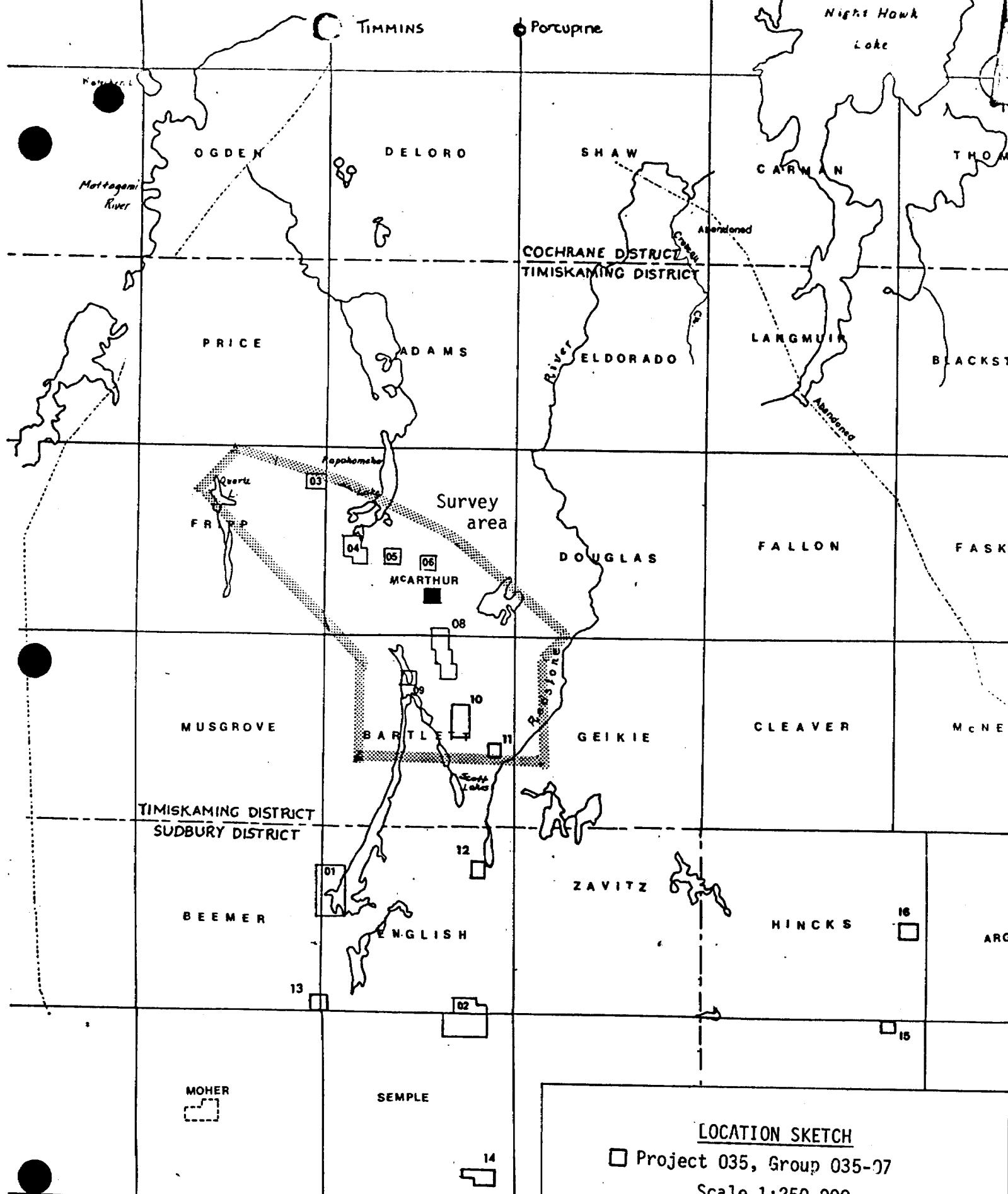
LOCATION AND ACCESS

The group of four claims is situated in south central McArthur township in the District of Timiskaming, Ontario.

The property was reached by an 800 metre east traverse from a major powerline. This powerline can be reached by a logging road which exits east from Papakomeka Lake Road at the McArthur/Bartlett township line.

TOPOGRAPHY AND RESOURCES

The relief of the property is moderate. A series of ridges trend north-south through the eastern claims. The central portion of the property is predominantly swampy ground.



LOCATION SKETCH
 □ Project 035, Group 035-07
 Scale 1:250,000

Vegetation consists of mature stands of pine and spruce with lesser poplar. Alders are found along McArthur Creek.

Water for diamond drilling is available from McArthur Creek which runs north-south through the centre of the property.

PREVIOUS WORK

From Assessment Files

In 1973, Abitibi Asbestos ran magnetic and electromagnetic geophysical surveys. They recommended two holes, neither of which were drilled.

Found in Field

None.

SURVEY METHOD

The survey was performed by S. Davies and L. de St. Jorre during July of 1982. Air photos at a scale of 1" = ¼ mile and air photo blow-ups at a scale of 1:5,000 were used as control while mapping.

REGIONAL GEOLOGY

Early Precambrian (Archean) metavolcanic and plutonic rocks underlie most of the area.

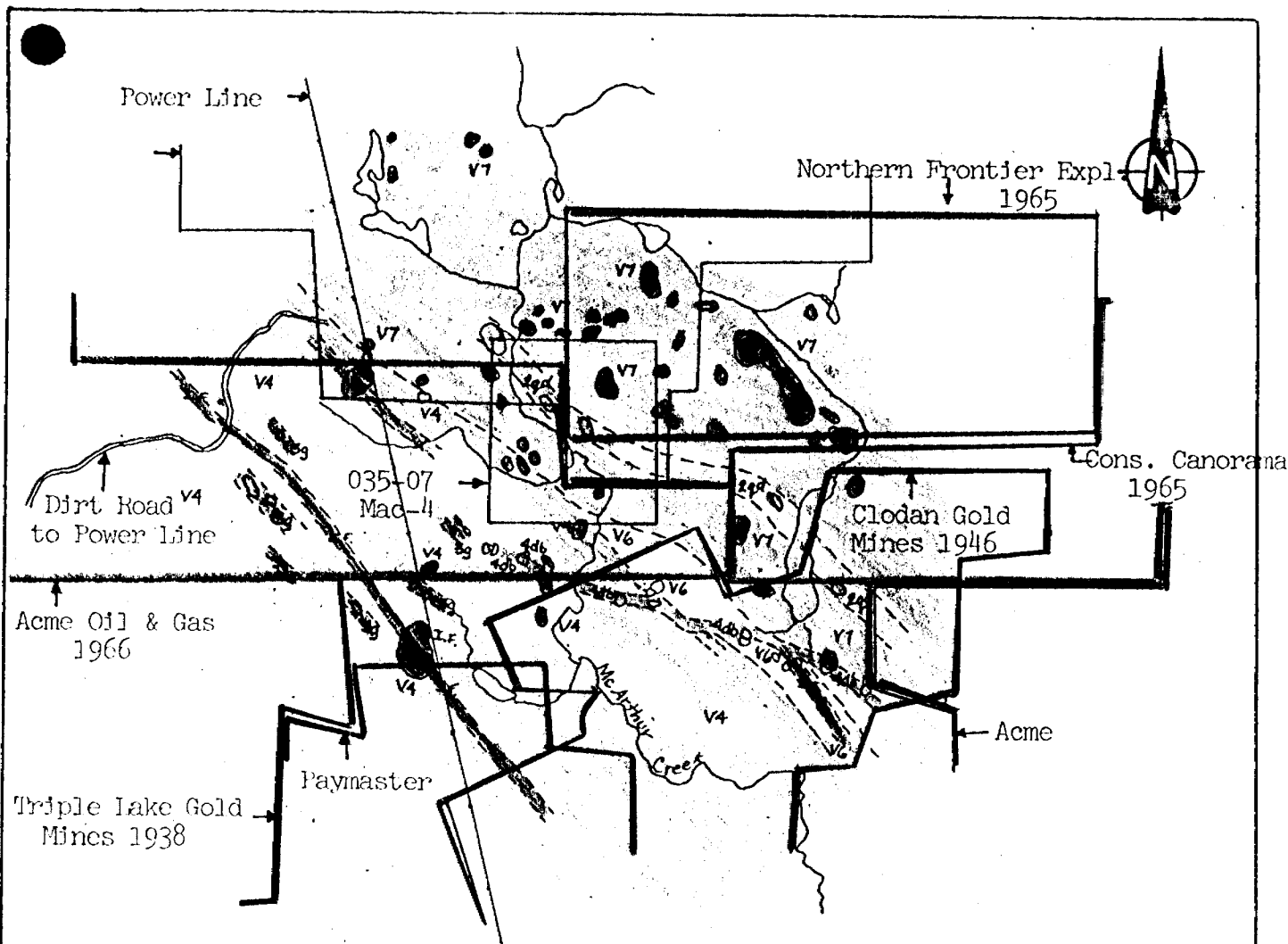
Two cycles of volcanism are recognized, each consisting of a lower unit of ultramafic metavolcanics, an overlying unit of mafic metavolcanics and an upper unit of intermediate to felsic metavolcanics.

A pre-tectonic, layered gabbroic sill and minor felsic epizonal intrusions are largely confined to the lower sequence of metavolcanics.

Late tectonic stocks of granodiorite and monzonite were emplaced within the metavolcanic-metasedimentary succession. The lower sequence of mafic and ultramafic metavolcanics was intruded by a large, complex granitic batholith composed of at least three separate intrusive phases.

Diabase dykes are numerous and are not confined to a specific metavolcanic sequence.

The major structural feature in the area consists of a domal structure in Geikie township that is flanked by large synclines to the north and south and numerous north trending faults which are probably part of the Onaping Lineament.



LEGEND

- V4 ■ Dacite
- V6 □ Andesite
- V7 ■ Basalt
- I.F. ■ Iron Formation
- 2qd □ Quartz-Diorite
- 3g ■ Gabbro
- 4d6 ■ Diabase

- Outcrop
- Geological Contact -observed
- - - - - Geological Contact -inferred

- Paymaster 1960 -E.M. & mag surveys
-6 holes drilled for Fe in I.F.
-3 holes drilled for Ni in peridotite
- Acme 1966 -geophysics; 2holes drilled into I.F.
- Northern Frontier 1965 -9 holes drilled
- Clodan 1946 - 11 holes drilled
- Cons. Canorama 1965 -E.M. & mag surveys
-9 holes drilled

— Triple Lake 1938-shaft

AMAX MINERALS EXPLORATION

PROJECT : Price (035)
 GROUP : 035-07; Mac- 4
 TOWNSHIP: McArthur
 SURVEY : Compilation
 DATE : August 1982
 SCALE : 1" = 1/2 mile

TABLE OF FORMATIONS

PHANEROZOIC

CENOZOIC

Quaternary - Pleistocene and recent

-----Unconformity-----

PRECAMBRIAN

LATE PRECAMBRIAN, MIDDLE PRECAMBRIAN - Olivine, quartz diabase

Huronian Supergroup

Cobalt Group

Gowganda Formation: Greywacke, arkose, conglomerate

-----Unconformity-----

EARLY PRECAMBRIAN (ARCHEAN)

Mafic Intrusive Rocks

Diabase

-----Intrusive Contact-----

Felsic Intrusive Rocks

-----Intrusive Contact-----

Metamorphosed Mafic and Ultramafic Rocks

Gabbro, serpentized peridotite, quartz gabbro

-----Intrusive Contact-----

METAVOLCANICS AND METASEDIMENTS

Intermediate to Felsic Volcanics:

Tuff, breccia, massive to pillowed flows, interlayered
siltstone, greywacke

Mafic Metavolcanics:

Massive and pillowed flows, tuff, volcanic breccia,
pyroclastic rocks

Ultramafic Metavolcanics:

Serpentized peridotite, spinifex texture flows,
tuff, carbonatized peridotite

PROPERTY GEOLOGY

The property is situated on a north-west trending quartz-diorite dyke which intrudes mafic metavolcanics of the Lower Volcanic Group.

The predominant rock type underlying the property is mafic metavolcanics (basalt). Pillow basalt and spinifex texture were found in the eastern claims. The basalt is moderately foliated, striking approximately north-south and dipping from 35° to 80° to the east.

Two minor gabbroic intrusions were found in the southwest claim.

Mineralization consisting of up to 5% cubic pyrite was found associated with a fine grained felsic rock in contact with the quartz-diorite. Quartz stringers were also found within this rock.

CONCLUSIONS AND RECOMMENDATIONS

The property is located on a quartz-diorite dyke which intrudes mafic metavolcanics.

No significant mineralization was found on the property. As a result, no further work can be contemplated on the property.

Respectfully submitted,

S. Davies

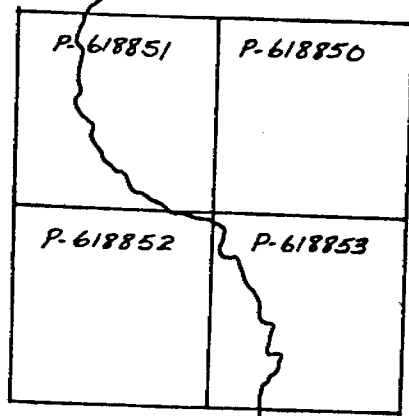
S. Davies

Timmins, Ontario
August, 1982



McARTHUR Twp.

McARTHUR Creek



TRANSMISSION LINE

CLAIM SKETCH

Project 035-07

MAC-4

McArthur Township

Scale: 1" = $\frac{1}{4}$ mile

APPENDIX A

SCHEDULE OF CLAIMS

PROJECT PRICE

035-07

Claim Group	Township	Number	Claim Numbers	Recording Date
Mac-4 035-07	McArthur	4	P 618850 P 618851 P 618852 P 618853	May 21/81 May 21/81 May 21/81 May 21/81

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.

J. A. MacPherson

Joseph A. MacPherson

Dated at Timmins, Ontario



Jan 31/83

Mining Lands Comments

~~no qualifications~~

OK

To: Geophysics

Comments

Approved Wish to see again with corrections

Date

Signature

To: Geology - Expenditures

Mr Kustra

Comments

Qualifications are for the supervisor of the project

Approved Wish to see again with corrections

Date

Mar - 7/83

Signature

C. Kustra

To: Geochemistry

Comments

LD

Approved Wish to see again with corrections

Date

Signature

To: Mining Lands Section, Room 6462, Whitney Block.

(Tel: 5-1380)

1982 12 02

371
2.5223

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 618850 et al in the Township of McArthur.

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

DW:sc

cc: Amax of Canada Limited
Timmins, Ontario
Attn: Sandra Davies.



MINERALS EXPLORATION
(A Division of AMAX OF CANADA LIMITED)

255 Algonquin Blvd. West
Timmins, Ontario
P4N 2R8

Telephone: (705) 264-5247

Our File: 035-07

November 24, 1982

Mr. F. W. Matthews,
Ontario Ministry of Natural Resources,
W1617, Whitney Block,
Queen's Park,
Toronto, Ontario.
M7A 1W3

RECEIVED

NOV 25 1982

MINING LANDS SECTION

Re: Mining Claims P.618850 et al.,
McArthur Township

Dear Sir:

Please find enclosed herewith two (2) copies of a report concerning a geological survey which was carried out over the below listed contiguous mining claims located in McArthur township.

P.618850 P.618851 P.618852 P.618853

A report of work 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
W. Good, Mining Recorder



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 McArthur

Claim Holder(s) Amax of Canada Limited

Survey Company Amax Minerals Exploration

Author of Report Sandra Davies

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

Covering Dates of Survey July 1982
(linecutting to office)

Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	618850
P	618851
P	618852
P	618853

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: Sept. 1, 1982 SIGNATURE: Sandra Davies
Author of Report or Agent

Res. Geol. _____ Qualifications None

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 4

OFFICE USE ONLY

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 _____

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 _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

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 _____

Adams Twp. - M.261

THE TOWNSHIP OF
OF

McARTHUR

DISTRICT OF
TIMISKAMING

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 X
- CANCELLED C.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

- RESERVATIONS:
- Ⓡ - Reserved for recreational purposes under Sec.3 P.L.A. File 188543.
 - Ⓢ - PUBLIC ACCESS POINT - S.R.O. RES. FILE 164584, vol.2

AREAS WITHDRAWN FROM DISPOSITION

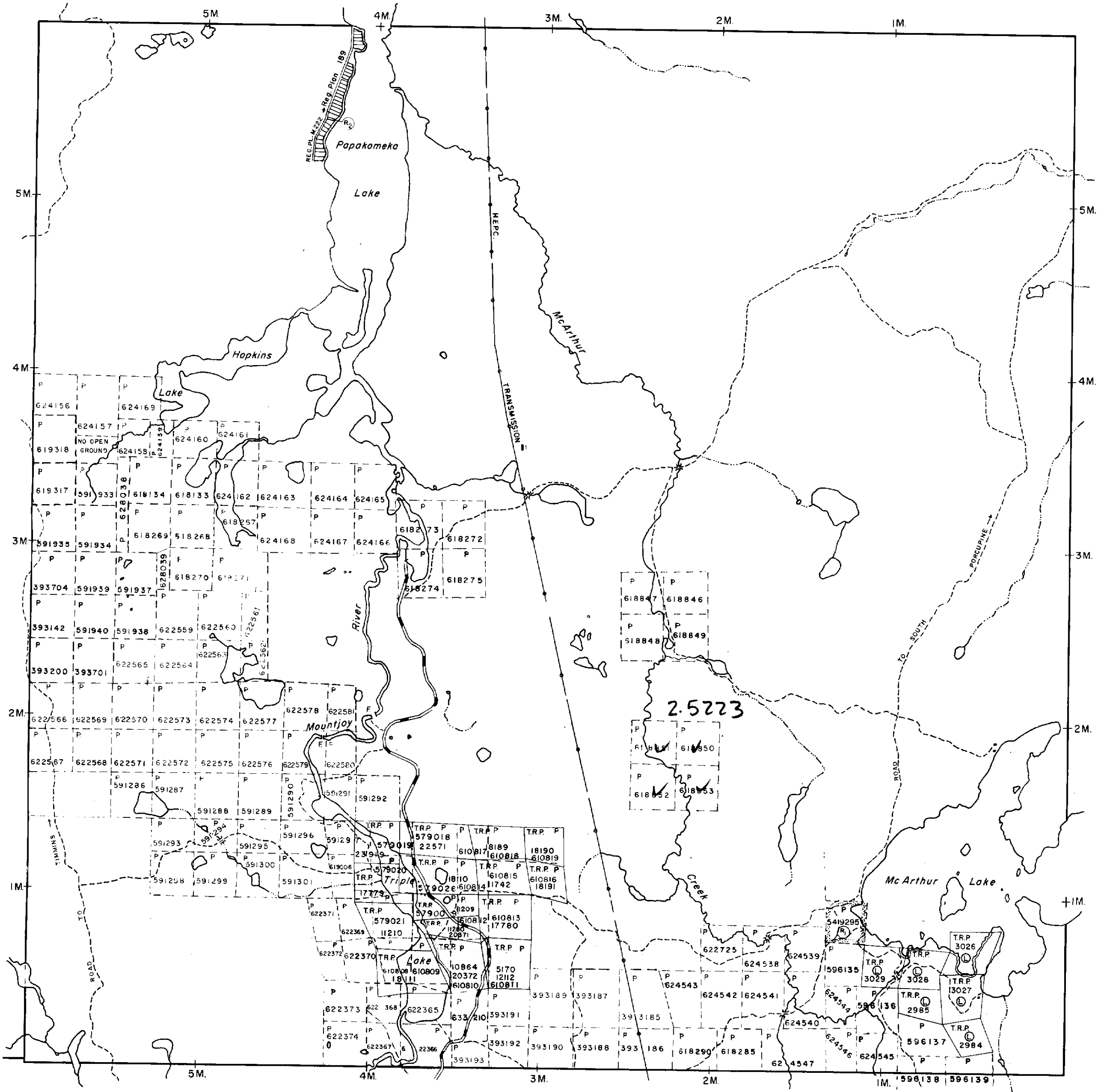
M.R.O. - MINING RIGHTS ONLY
S.R.O. - SURFACE RIGHTS ONLY
M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
Ⓡ SEC. 36/80	W.8/83	1/2/83	M.&S.	

DATE OF ISSUE
JUL - 4 1983

Ministry of Natural Resources
PLANNING TORONTO **M.298**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH



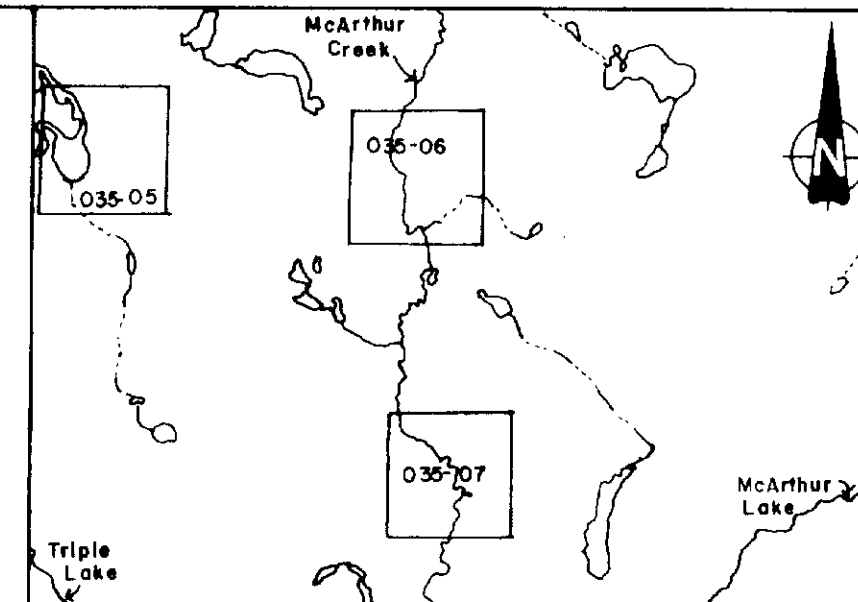
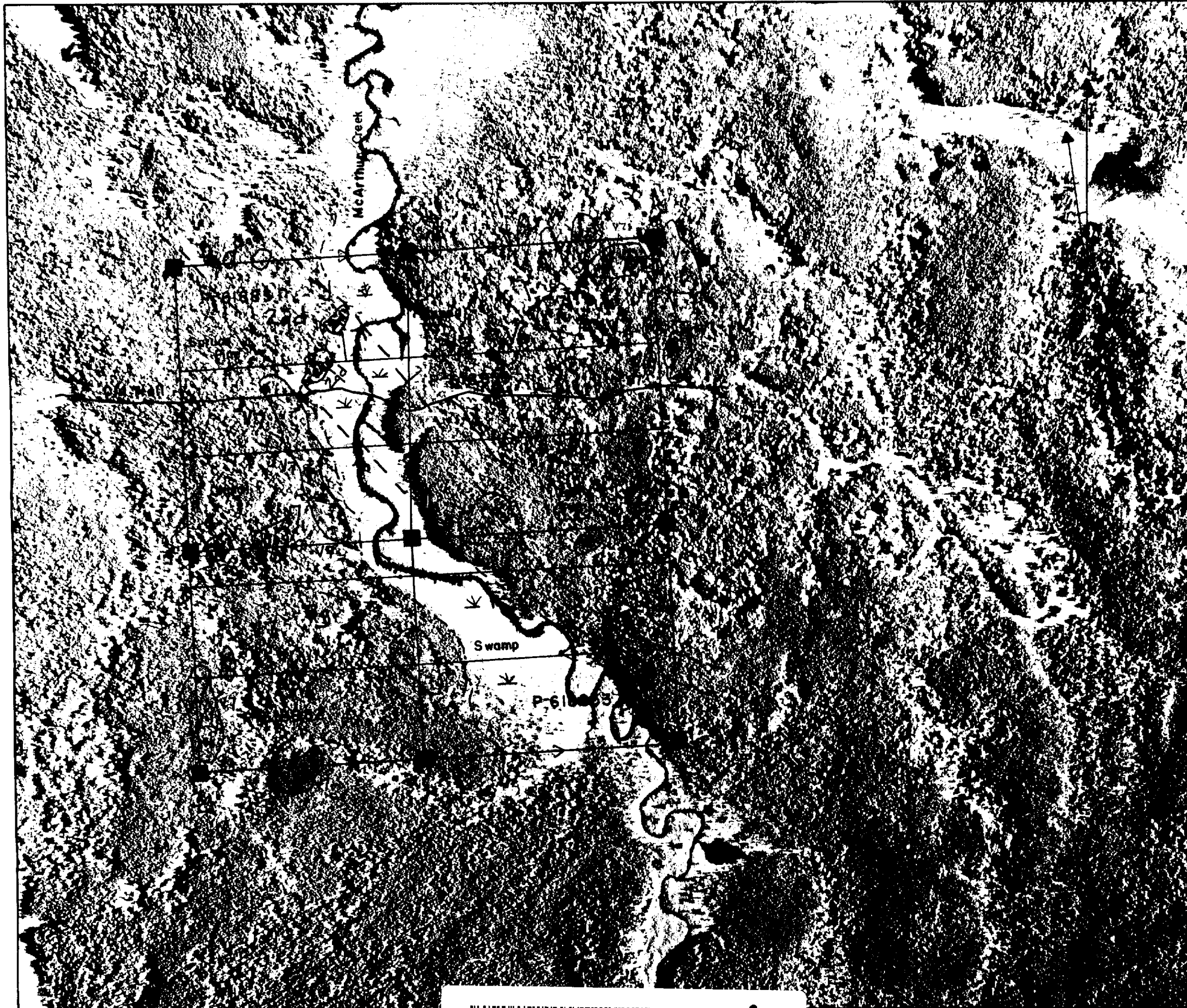
Frripp Twp. - M.281

Douglas Twp. - M.274

Bartlett Twp. - M.262



42A03NE0031 2.5223 MCARTHUR



INDEX MAP

Scale: 1:50,000

LEGEND

- V6 - Andesite
- V7 - Basalt
- 2qd - Quartz-Diorite
- 3g - Gabbro

SYMBOLS

- - Claim Post
- - Traverse Line
- - Outcrop
- f - Foliation (dip known)
- p - Pillows (tops unknown)
- - - - - Geological contact - inferred
- ↔ - Swamp
- Swamp Boundary
- - - - - Old Trail

Amax Minerals Exploration

McArthur Township

Geology Survey

035-07; Mac-4

Scale 1:5,000

NTS 42-A-6
42-A-3

July 1982

To Accompany Report By: *S. Davies*

Timmins, Office



42A03NE0031 2.5223 MCARTHUR

2-5223