



42A10SW0307 2.5280 MATHESON

010

Report of Geology
Driftwood Project
Four Mining Claims, S $\frac{1}{2}$ of Lot 6, Concession V
Matheson Township
Ontario

RECEIVED

DEC 15 1982

MINING LANDS SECTION

Asarco Exploration Company of Canada Limited

A.S. Horvath

December 1982



42A10SW0307 2.5280 MATHESON

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Maps Accompanying Report

Location Map - Scale 1 inch = 1/2 mile

Geology Map (rear cover folder) - Location Map - Scale 1 in = 1/2 mile
 - Geology Map - Scale 1 cm = 25 m.
 - Detailed Geology Map 1 cm = 1 m.

Summary

In June 1982, a geological survey was completed on the Driftwood property, which consists of four mining claims located in the S½ of Lot 6, Concession V, Matheson Township, Ontario.

Most of the claim group is drift covered but a large outcrop with spotty exposure is located in the N.E. corner of the S½ of Lot 6, Concession V on claim number P528061.

The outcrop is a fuchsitic carbonate rock. Five exposures were sampled and analyzed for Au with no resultant values above .002 oz/t.

Location and Access

The Driftwood property is located in the S½ of Lot 6, Concession V, Matheson Township, Ontario. The property is easily accessible from the town of Hoyle at the junction of Highway #101 and #610. From the town of Hoyle, the property may be reached by travelling approximately 3½ miles north on Highway #610 from the junction with Highway #101. Here Highway #610 turns to the east across the Ontario Northland Railway line, along the Concession III and Concession IV line. Approximately 660 feet from the turn, Highway #610 intersects a north-south gravel road along the Lot 6 - Lot 7 line. One mile north of this intersection, the gravel road meets the S.W. corner of the claim group and runs adjacent to the western boundary of the four claims.

Property

The Driftwood property consists of a group of four mining claims located in the S½ of Lot 6, Concession V, Matheson Township, Ontario. They have mining claim numbers P528059 to P528062, inclusive.

Previous Work

Asarco Exploration Company of Canada Limited has conducted a fair amount of work on these four claims of the Driftwood property. The work includes a reverse circulation overburden drilling program in May 1979, consisting of two holes to a total depth of 160 feet. In October 1979, a magnetometer and VLF-EM survey was completed and in June 1982, a horizontal loop max-min EM survey was completed.

Geology

Three out of four claims constituting the Driftwood property are drift covered and a majority of the fourth is also drift covered except for a small ridge or knoll with spotty outcrop exposure located in the north-east corner of claim number P528061. A previously cut grid with north-south lines spaced 100 meters apart was used to traverse the entire claim group.

The rock outcrops constituting this ridge are a greenish grey coloured rock weathering to a medium grey colour. The rock is best termed a fuchsitic carbonate rock with abundant grey white carbonate veins and green grey fuchsitic carbonate. It contains up to 1-2% disseminated pyrite and small quartz veinlets up to a $\frac{1}{4}$ inch thick are not uncommon.

The only remaining bedrock information was obtained from chip samples during the overburden drill program in 1979. Two holes were drilled. One hole, located 600 feet east of post #3 of claim 528060, encountered a soft green chloritic schist. The second hole located 1,500 feet east of the first hole encountered a green dacitic tuff.

Most of the two claims P528061 and P528062 contain a mixed pine and alder growth except for occasional areas of slightly higher relief which provide for a mixture of pine, birch, and poplar growth. In the N.E. corner of claim number P528061 to the north and west of the outcrop, a small creek flows to the northeast and a succession of beaver dams has resulted in the formation of a beaver pond and bog area several hundred feet in dimensions. Claims P528059 and P528060 are on slightly higher ground resulting in a mixed pine, birch and poplar growth over most of the claims except for minor alders growing near two creeks.

A network of old bush trails and roads are still clearly maneuverable on foot in claims P528059 and P528060. Several old blast pits were located along these trails, where evidently, previous prospectors or companies made an apparently unsuccessful attempt to reach bedrock.

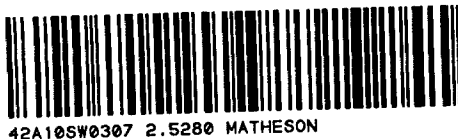
Respectfully submitted,

A handwritten signature in cursive script, appearing to read "A.S. Horvath".

Alex S. Horvath

#464

The Mining



900

Type of Survey(s) **Geological** **Matheson**

Claim Holder(s) **Asarco Exploration Co. of Canada Limited** Prospector's Licence No. **A 22916**

Address **12th Floor, 350 Bay Street, Toronto, Ontario M5H 2S6** **2.5280**

Survey Company **Asarco Exploration** Date of Survey (from & to) **7 6 82 8 6 82** Total Miles of line Cut

Name and Address of Author (of Geo-Technical report) **A. Horvath, Asarco Exploration Co. of Canada Ltd., 350 Bay St., Toronto**

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	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	

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
P	528059				
	528060				
	528061				
	528062				

RECEIVED
DEC 20 1982

MINING LANDS SECTION

RECORDED

DEC - 6 1982

Receipt No.

Expenditures (excludes power stripping)

Type of Work Performed **RECEIVED**

Performed on Claim(s) **RECEIVED**

Calculation of Expenditure Days Credits

Total Expenditures \$ + 15 =

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. **4**

For Office Use Only

Total Days Cr. Recorded **80** Date Recorded **Dec. 16/82** Mining Recorder **[Signature]**

Date Approved at Recorded **83.07.19** Branch Director **[Signature]**

Date **Dec. 13/82** Recorded Holder or Agent (Signature) **[Signature]**

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 **R.J. Dean, Asarco Exploration Co. of Canada Ltd., 12th Floor, 350 Bay St., Toronto, Ontario M5H 2S6**

Date Certified **Dec. 13, 1982** Certified by (Signature) **[Signature]**



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
Township or Area Matheson
Claim Holder(s) Asarco Exploration Co. of Canada
Limited
Survey Company Asarco Exploration
Author of Report A. Horvath
Address of Author 12th Floor, 350 Bay St., Toronto
Covering Dates of Survey June 7, 1982 to Dec. 10, 1982
(linecutting to office)
Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

P..... 528059
(prefix)..... (number)
..... 528060
..... 528061
..... 528062

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 _____

RECEIVED

DEC 15 1982

MINING LANDS SECTION

If space insufficient, attach list

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

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

DATE: Dec. 13, 1982 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications 2.5195

Previous Surveys

File No.	Type	Date	Claim Holder

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 _____

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 _____

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)

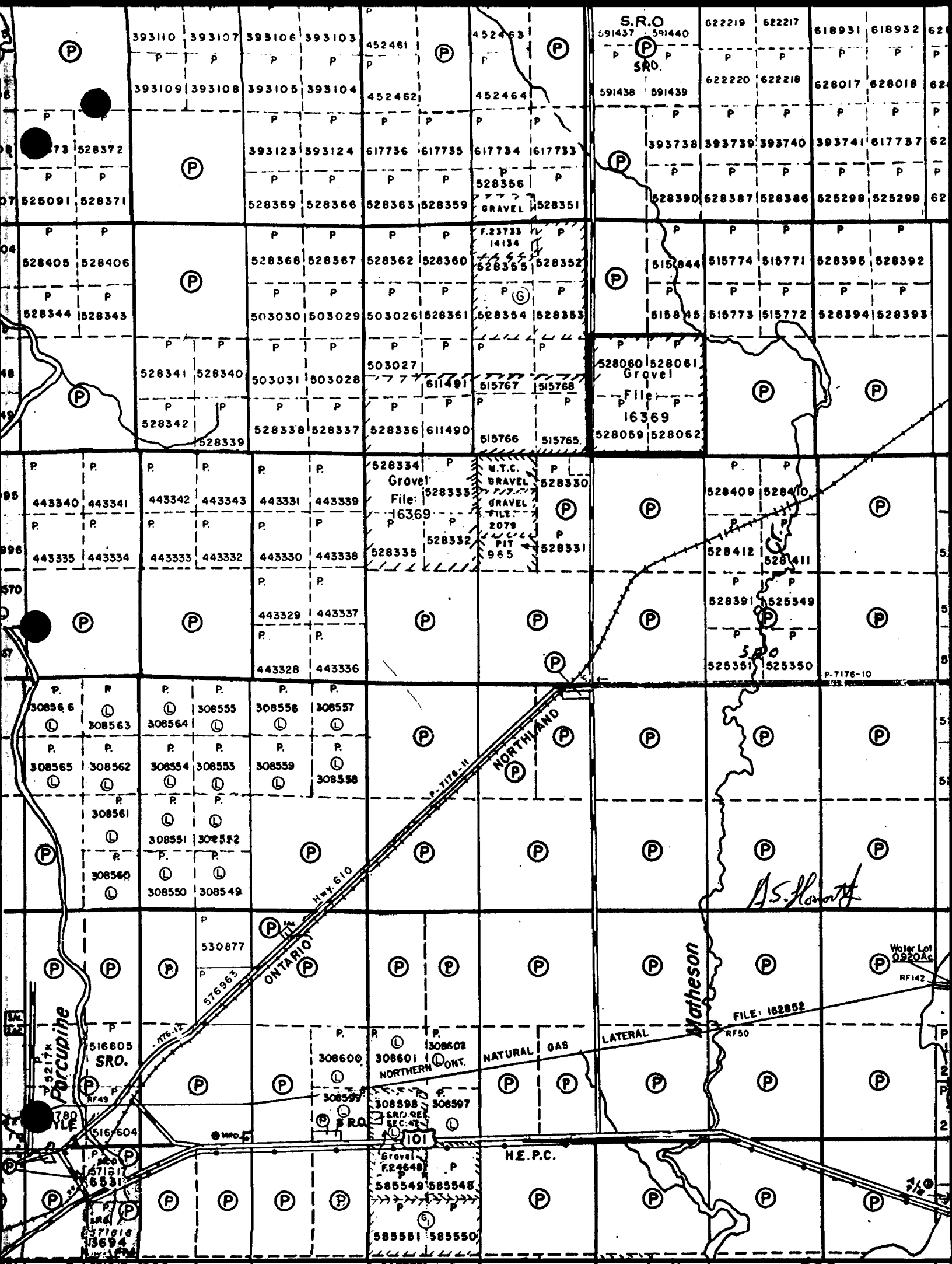
Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____





Feb 1/83

Mining Lands Comments

- map not colored
 - outcrop not shown - outcrop is shown in NE corner of claim group. No outcrop elsewhere

To: Geophysics

Comments

Approved Wish to see again with corrections Date Signature

To: Geology - Expenditures *m/r Kustka*

Comments

should have been colored

Approved Wish to see again with corrections Date *Mar 28/83* Signature *C Kustka*

To: Geochemistry

Comments

L.D.

Approved Wish to see again with corrections Date Signature

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

June 2, 1983

2.5280

Asarco Exploration Co. of Canada Limited
12th floor, 350 Bay Street
TORONTO, Ontario
M5H 2S6

Attention: A. Horvath

Dear Sirs:

Re: Geological Survey submitted on Mining Claims
P 528059 et al in the Township of Matheson

Enclosed are the plans, in duplicate, for the above mentioned survey.
Please show the outcrop designated by colour corresponding to the
rock type as listed in the legend.

For further information, please contact Mr. F. W. Matthews at
416/965-1380.

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

R.Pichette:eib

encls.

cc: Mr. William L. Good
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
TIMMINS, Ontario
P4N 2S7

1982 12 20

2.5280

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 528059 et al in the Township of Matheson.

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

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

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: Asarco Exploration Co of Canada Limited
Toronto, Ontario
Attn: A. Horvath.

Asarco Exploration

R. S. Gray
Manager

December 13, 1982

Mr. F.W. Matthews
Mining Lands Section
Room 6450, Whitney Block
Ministry of Natural Resources
Queen's Park, Toronto
M7A 1W3

Driftwood Project
Matheson Township

Dear Sir:

Please find enclosed duplicate copies of a technical report covering a geological survey completed by Asarco Exploration in Matheson Township.

A Mining Act Report of Work has been sent to the Mining Recorder, Timmins Ontario. Thank you for your assistance.

Yours truly,



R.J. Dean

RJD:mm

Encl.

RECEIVED	
Land Management Branch	
CIRCULATE	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
BY	
DEC 14 1982	
E. F. ANDERSON	
J. R. MORTON	
J. C. SMITH	
G. SHERMAN	
J. M. SMALL	
RETURN TO R. 6450	

Evelyn Twp.

THE TOWNSHIP OF
OF
MATHESON

DISTRICT OF
COCHRANE
PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND (P)
- CROWN LAND SALE (S) or (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 (—)

NOTES

Reserve Flooding Rights to 903' Contour to H.E.P.C. on Frederick House River.

400' Surface rights reservation around all lakes & rivers.

This township lies within the Municipality of CITY of TIMMINS.

RESERVATIONS:

SAND AND GRAVEL

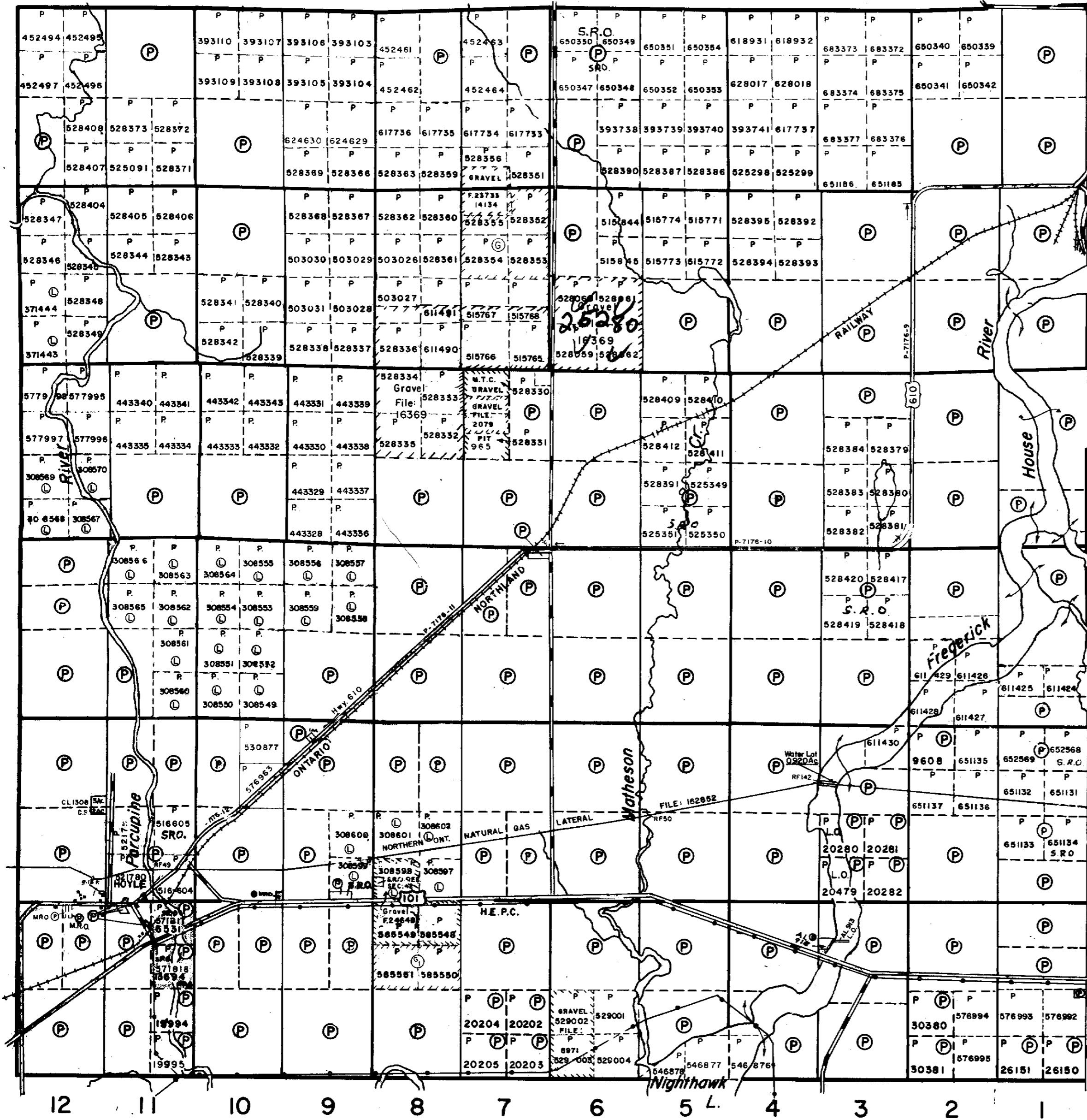
- (G) QUARRY PERMIT
- (MNR) GRAVEL RESERVE FILE 24648

DATE OF ISSUE
JUL 15 1983
Ministry of Natural Resources
TORONTO

PLAN NO. - M-297

ONTARIO
MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH



Hoyle Twp.

German Twp.

Cody Twp.



