



42A06NE0369 2.5660 SHAW

010

SUMMARY REPORT

on

ALLERSTON-SHAW PROPERTY

SHAW TOWNSHIP, ONTARIO

for

PETROMET RESOURCES LIMITED

RECEIVED

JUN 28 1983

MINING LANDS SECTION

Toronto, Ontario,
June, 1983.

W.E. Brereton, P.Eng.

Qual.
2.1310

2.5660



42A06NE0369 2.5660 SHAW

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1.0 INTRODUCTION

Interest in the four Allerston claims centres around the presence of a talc-magnesite zone in an ultramafic body in the southeast portion of the property.

The claims were examined by MPH Consulting Limited in early June, 1983. This report presents a summary of the field investigations.

2.0 PROPERTY

The four unpatented mining claims are numbered 624691 to 624694 inclusive. They are registered in the name of Mr. R.E. Allerston, Timmins, Ontario, and are presently under option to Petromet Resources Limited of Calgary, Alberta. The claims are on a six month extension to June 17, 1983.

3.0 LOCATION, ACCESS AND INFRASTRUCTURE

The property is centred 4 miles south-southeast of South Porcupine, a town of 5,000 population in northeastern Ontario. The larger centre of Timmins is located 5 miles west of South Porcupine.

The Langmuir Mine road, or, as it is known locally, the "Springs Road", passes one half claim to the east of the property. Old roads lead off this to the northwest and southeast portions of the group thereby providing easy access to the claims.

A large timber operations area extends from the Springs Road onto claim 624691.

Manpower and materials are available from surrounding centres of service and supply such as Timmins. The Ontario Northland Railway line passes through South Porcupine.

4.0 REGIONAL GEOLOGY AND MINERAL OCCURRENCES

In a regional context, the Allerston claims occur in the north portion of the Shaw Dome. This imperfectly understood feature is the main structural element south of the Porcupine-Destor Fault in the Porcupine gold camp.

The older of the two rock groups currently recognized in the camp, the Deloro Group, forms the outcrop in the Shaw Domal Structure.

Rocks of the Deloro Group are primarily of calc-alkaline affinity. They comprise mainly andesite and basalt flows in the lower part with dacitic to rhyolitic flows and pyroclastics, often with abundant iron formation towards the top. Large, generally sill-like, bodies of ultramafic rocks intrude Deloro Group metavolcanics along with minor granitic rocks and some later cross-cutting diabase dikes.

There are two well-known magnesite + talc occurrences in the Shaw Dome, the Allerston-Whitney and the Canadian Magnesite deposits.

The former is a major talc-magnesite deposit in carbonatized ultramafic rocks intrusive into the Deloro Group located approximately 3 miles to the north of the present occurrence in southwest

Whitney Township. This is owned by Mr. Allerston and is also under option to Petromet. The mineralization occurs in two zones, "North" and "South", with total reported tonnage in excess of 30 million tons of talc-magnesite rock. There is potential for substantially more tonnage (R. Allerston, pers. comm.).

The Canadian Magnesite deposit of magnesitic rock is located in south Deloro Township to the southwest of the present property. Extensive quartz veining is reported to be a problem in the production of a magnesia product. The deposit again represents a carbonatized zone in ultramafic intrusive rocks.

5.0 PROPERTY GEOLOGY AND MINERAL OCCURRENCES

The Allerston-Shaw property is largely swamp-covered. Extensive traversing located only three outcrop areas, these in the central portion of the group.

Map 1, at rear, presents property geology.

5.1 Magnesite Zone

A magnesite zone is exposed in the northwest portion of claim 624691 (rock type 2). This material consists almost entirely of beige to greenish or greyish carbonate rock. A dirty brownish weathering surface and a brownish to reddish weathering rind to $\frac{1}{2}$ " is characteristic. A finely crystalline aspect is evident on a fresh surface. There is no reaction with weak HCl. The carbonate is accepted to be mainly magnesite (with some siderite ?) on the basis of physical properties although analytical or staining tests or thin section studies were not carried out by the present author.

In the blasted pit on the south outcrop, a laminated texture is evident with lesser bluish-black carbonate laminae to $\frac{1}{4}$ " within beige carbonate material.

The outcroppings display stringers, ribbings and patches of light bluish-white weathering carbonate material which stands out in slight relief on the weathered surface. This ribbing defines an approximate east-west schistosity.

The small outcrop at the road contains 1% or more of a very finely disseminated, black mineral with a metallic/submetallic lustre - ilmenite?

There is no obvious talc in this portion of the zone. Also, these rocks are non-magnetic.

The outcroppings are cut by numerous quartz stringers, generally $\frac{1}{4}$ " to 1" in width. This is best displayed in the blasted pit area on the south outcrop.

5.2 Talc-Magnesite Zone

A talc-magnesite zone occurs along the south edge of serpentine outcrop immediately to the north of the previous magnesite-quartz zone.

The first observation here is that there is a prominent, near-vertical schistosity in the talc-carbonate rock. There

has been some shearing concomitant with and post talc-carbonate development. The rock consists of translucent, light greenish talc laminae within beige weathering carbonate material. On a fresh surface, the magnesite is brownish to whitish coloured with a sugary aspect and predominates greatly over talc. The easternmost exposure appears to be richer in talc than that to the west. There is no obvious quartz. Results of two grab samples taken from this zone by Mr. Allerston are presented as Appendix 1 to this report. Both samples contained 50% talc mineral.

The progenitor of the talc-carbonate material is in contact with and to the north of the schistose talc-carbonate zones. This parent rock is a serpentized dunite (rock type 1). It is a relatively massive lithology with abundant, close-packed relict olivine crystals to $\frac{1}{4}$ " or more. These may impart a knobby aspect to the weathered surface. An apple green colour on fresh surface is diagnostic. Weathered surfaces have a brownish colour. The rock is variably magnetic.

The serpentine is abundantly joint fractured. Fractures are filled with recessive-weathering talc-carbonate material along with cross and slip-fibre asbestos. The former is generally in the $\frac{1}{8}$ " to $\frac{1}{4}$ " range.

The serpentine is in contact to the north of the property with mafic metavolcanics including pillowed varieties (rock type 3) in a gravel pit.


6.0 CONCLUSIONS AND RECOMMENDATIONS

Magnesite and talc-magnesite zones on the Allerston property in Shaw Township, Ontario, were located and examined.

Lack of outcrop precluded a rigorous evaluation of widths and possible tonnages involved. A schistose talc-bearing zone along the south edge of serpentinite outcrop can be seen in outcrop to be at least 30 ft. wide. Indicated talc grades on grab samples are in the 50% range. To the south of this occurs a silicified magnesite zone of unknown width.

As a first step in further evaluating the economic potential of the magnesite + talc zones, fresh bulk samples should be collected for analysis via a small programme of stripping and blasting. If these results are encouraging, a program of diamond drilling will be required to evaluate the deposit.

Respectfully submitted,



W.E. Brereton, P.Eng.

Toronto, Ontario,
June, 1983.

APPENDIX 1

LABORATORY REPORT
MINISTRY OF NATURAL RESOURCES
MINERAL RESEARCH BRANCH
77 GRENVILLE STREET, 11TH FLOOR
TORONTO 181, ONTARIO
TELEPHONE: 965-1337

REPORT NUMBER

C 18202

DATE..... AUG. 23, 1976

R.E. Allerston, 322 Elm Street North, TIMMINS, ONTARIO

JOB 76-896

DETERMINATION OF TALC AND MAGNESITE CONTENT

Method: Our estimate of the talc and magnesite content was made from a mineralogical examination, x-ray diffractometry, and a partial elemental analysis.

Mineralogy

The following table contains minerals, with estimated amounts present, found in your samples by hand specimen examination, chemical analysis, and x-ray diffractometry.

<u>Mineral</u>	<u>S-1</u>	<u>S-2</u>
Talc- (Minnesotaitite)	50%	50%
Magnesite	42	42
Siderite	5	5
Chlorite	2	2
Calcite	1	1

S-1 is light beige (unweathered) in colour. The grain size is very fine and the rock is soft and powdery. S-2 is a mottled grey and greenish colour. It is fine grained, soft and powdery.

Elemental Analysis

	<u>S-1</u>	<u>S-2</u>
SiO ₂	32.0	31.7
Fe ₂ O ₃ (total)	5.60	4.80
Al ₂ O ₃	0.50	0.50
CaO	0.35	0.35
MgO	36.6	37.0
*H ₂ O (total)	1.07	1.12
CO ₂	23.0	22.8
L.O.I.	25.07	24.86



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

#163

Instructions: - Please type or print.
- If number of mining claims traversed
on this form attach a list.

Aug 15 82



42A06NE0369 2.5660 SHAW

The 1

900

Type of Survey(s) Geological

Claim Holder(s) R.E. Amerson

Address 543 Pine St N Timmins Ont P4N 6L9

Survey Company MPH Consulting

Date of Survey (from & to) 2 6 83 15 6 83 Total Miles of Line Cut

Name and Address of Author (of Geog. Technical report)
W.E. Breerton 706-141 Adelaide St W Toronto M5H 3L5

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	
	- Radiometric	
For each additional survey: using the same grid: Enter 20 days (for each)	- 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	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	624691				
	624692				
	624693				
	624694				

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JUN 17 1983
MINING LANDS SECTION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

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.

Date June 14/83 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
W.E. Breerton 706-141 Adelaide St W Toronto M5H 3L5

Date Certified June 14/83 Certified by (Signature) [Signature]

For Office Use Only

Total Days Cr. Recorded 80 Date Recorded June 14/83 Mining Recorder [Signature]

Date Approved or Recorded 83.11.23 Branch Director [Signature]

RECORDED
JUN 14 1983
Receipt No.

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

2.5666



November 14, 1983

Mr. E.F. Anderson
Director
Land Management Branch
Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

RECEIVED	
Land Management Branch	
CIRCULATE	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
BY	
NOV 17 1983	
E. F. ANDERSON	
J. R. MORTON	
J. C. SMITH	
W. L. GOOD	
J. M. FERRELL	
REV. 450 R. 6643	

Dear Sir:

Re: Enclosed Notification

Please note that the indicated geological traverse lines are representations only. The actual traversing carried out was much more meandering and circuitous in an attempt to locate additional outcrop on the property.

Also, I have recalculated 12 hour days to 8 hour days for the time involved in the actual field work.

Yours very truly,

MPH CONSULTING LIMITED

W.E. Brereton, P.Eng.
Vice President

WEB/pb

Encls.

RECEIVED

NOV 17 1983

MINING LANDS SECTION

1. Type of Survey Geological
2. Township or Area Shaw
3. Numbers of Mining Claims Traversed by Survey
P. 624691, 624692, 624693, 624694
4. Number of Miles of Line Cut _____ Flown _____
- *5. Number of Stations Established _____
- *6. Make and type of Instrument Used _____
- *7. Scale Constant or Sensitivity _____
- *8. Frequency Used and Power Output _____

9. Summary of Assessment Credits (details on reverse side)

Total 8 hour Technical Days (Include Consultants, Draughting etc.) _____

Total 8 hour Line-Cutting Days _____

Calculation

$$\frac{12}{\text{Technical}} \times 7 = \frac{84}{\text{Line-cutting}} + \frac{0}{\text{Line-cutting}} = \frac{84}{\text{Line-cutting}} \div \frac{4}{\text{Number of claims}} = \frac{20}{\text{Assessment credits per claim}}$$

The dates listed on this form represent working time spent entirely within the limits of the above listed claims Check
If otherwise, please explain _____

Dated: Nov 14/83

Signed: W. B. [Signature]

- Note: (A) * Complete only if applicable.
(B) Complete list of names, addresses and dates on reverse side.
(C) Submit separate breakdown for each type of survey.
(D) Submit in duplicate.

Details of Assessment Work Breakdown

FIELD WORK

<u>Type of Work</u>	<u>Name & Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
	G. Sinclair 1/246-120 Adelaide S.W. Toronto	June 1-4 /83	5
Geological Technician - prospecting			

CONSULTANTS

<u>Name & Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>
W. B. Brunton field	P.O. Box - 44 Hazelwood Ave Toronto June 1-4 /83	5
office	June 15 /83	1

DRAUGHTSMAN, TYPING, OTHERS (specify)

<u>Name & Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
Geocartographic Services Ltd, drafting, typing	Adelaide St, Toronto	June 18 /83	1

TOTAL 8 HOUR TECHNICAL DAYS 12

LINE-CUTTING

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

TOTAL 8 HOUR LINE-CUTTING DAYS _____

October 5, 1983

2.5660

Mr. R.E. Allerston
543 Pine Street North,
Timmins, Ontario
P4N 6L9

Dear Sir:

RE: Geological Survey submitted on mining claims
P 624691 et al in the Township of Shaw

The manner in which you conducted a geological survey of mining claims P 624691 et al does not qualify for work credits under the Special Provisions method. In order to qualify, the claims should have been systematically covered with the line spacing not exceeding 400 foot intervals.

Please therefore, provide a man-days breakdown listing the names and addresses of the employees and the dates that each man worked on the various phases of the survey. The survey will then be assessed under the provisions of sub-section (11) of Section 77 of The Mining Act R.S.O. 1980.

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 5010
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-1380

D. Kinvig:mc

Encl.

cc: W.E. Brereton
MPH Consulting
141 Adelaide Street West
Toronto, Ontario
M5H 3L5

cc: Mining Recorder
Timmins, Ontario

August 29, 1983

2.5660

Mr. R.E. Allerston
543 Pine Street North
Timmins, Ontario
P4N 6L9

Dear Sirs:

RE: Geological Survey submitted on Mining Claims P 624691
et al in the Township of Shaw

Enclosed are the plans, in duplicate, for the above-mentioned survey. Please indicate the traverse lines and return the maps to this office.

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

D. Kinvig:mc

Encl.

cc: Mining Recorder
Timmins, Ontario



Ministry of
Natural
Resources

Geotechnical
Report
Approval

File
2.5660

July 8/83.

Mining Lands Comments

To: Geophysics

Comments

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

To: Geology - Expenditures *Mr. Kustra.*

Comments

<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>Aug 10/83</i>	Signature <i>CKustra</i>
--	---	--------------------------	-----------------------------

To: Geochemistry

Comments

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

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

#163 P624691

1983 07 06

2.5660

Mr. William L. Good
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 P624691 et al in the Township of Shaw.

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

A. Barr:mc

cc: Mr. R.E. Allerston
543 Pine Street North
Timmins, Ontario
P4N 6L9

cc: Mr. W.E. Brereton
Suite 706
141 Adelaide Street West
Toronto, Ontario
M5H 3L5

MAP SYMBOLLOGY

Aerial Cableway	Pipeline (above ground)
Boundary	Railroad
International	Double Track
Domestic	Abandoned
District, Township	Turntable
Indian Reserve	Road
Accretion	Highway, County
Lot, Concession	Traverse
Approximate	Access (road of doubtful maintenance or sign-posted driveway)
Park Boundary	Trail, Back Road (unimproved)
Bridge	Rapids
Road, Railroad	Double line river with multiple rapids
Building	Double line river with multiple rapids
Chimney	Reservoir
Cliff, Pit, Pile	River, Stream, Canal
Contours	Approximate
Interpreted	Approximate
Approximate	Approximate
Depression	Approximate
Control Points	Approximate
Horizontal	Approximate
Vertical	Approximate
Culvert	Approximate
Falls	Approximate
Double line river	Approximate
Fence, Hedge, Wall	Approximate
Feature Outline (Construction features, etc.)	Approximate
Flooded Land	Approximate
Lock	Approximate
Marsh or Swamp	Approximate
Mast	Approximate
Mine Head Frame	Approximate
Outcrop	Approximate

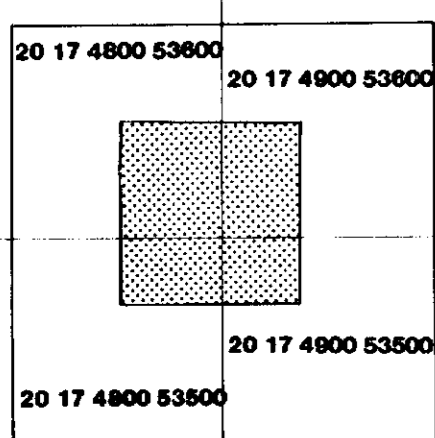
AREAS WITHDRAWN FROM DISPOSITION

S.R. - SURFACE RIGHTS		M.R. - MINING RIGHTS	
Description	Order No.	Date	Disposition
Rec. Prop.	Sec. 3 P.L.A.	189543	
	W. 91/77	16/12/77	S.R.O. 86555

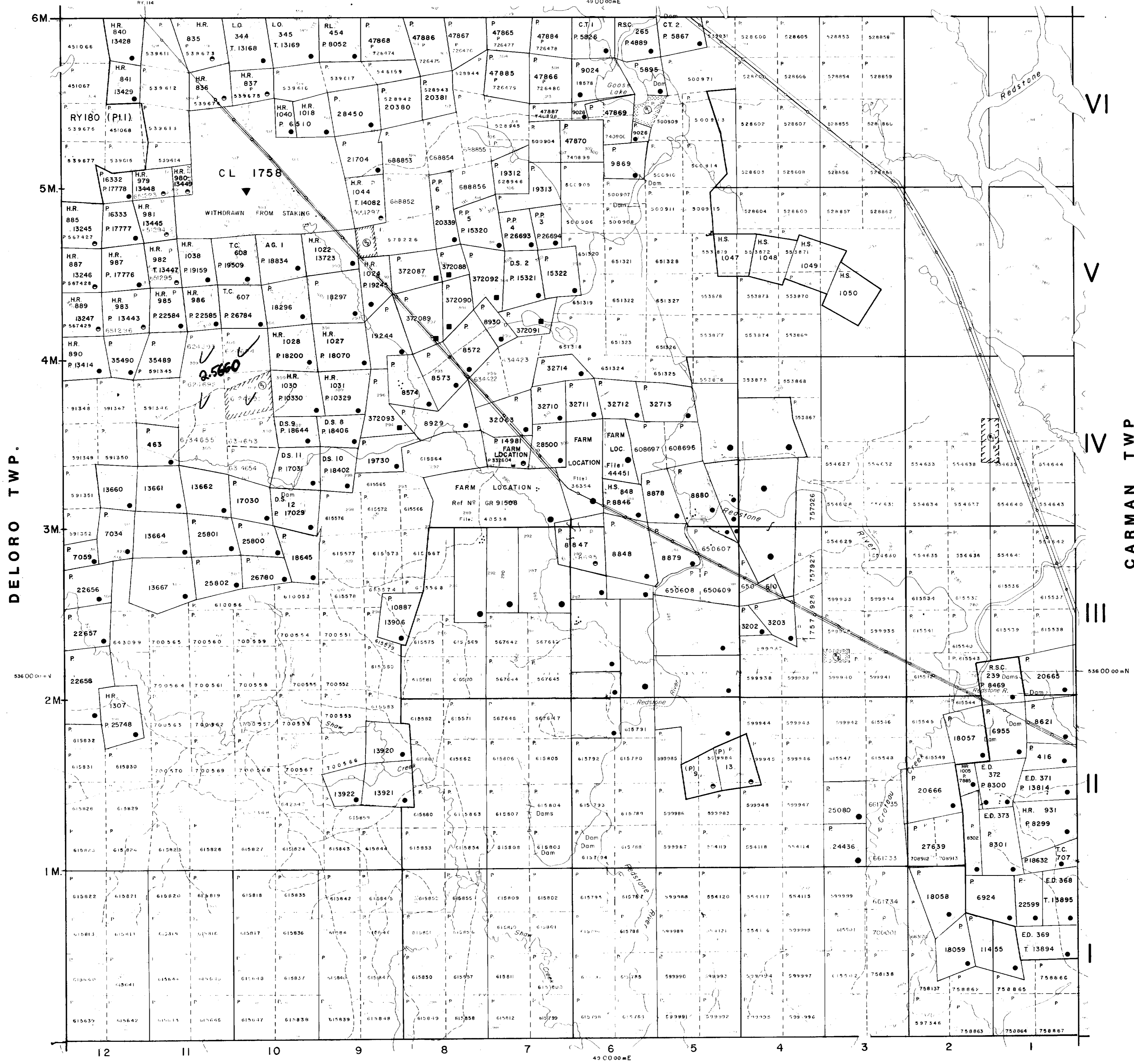
SAND AND GRAVEL

GRAVEL	53666
GRAVEL	68760

KEY PLAN For O.B.M. Map



WHITNEY TWP.



ELDORADO TWP.

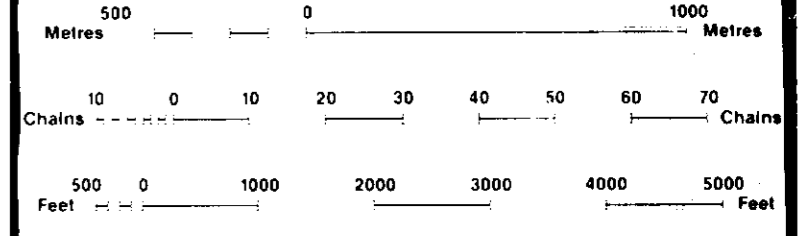
LEGEND

HIGHWAY AND ROUTE No.	
OTHER ROADS	
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	◑
" SURFACE RIGHTS ONLY	◒
" MINING RIGHTS ONLY	◓
LICENCE OF OCCUPATION	◔
ORDER-IN-COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊘
SAND & GRAVEL	⊙

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 300, SEC. 63, SUBSEC. 1.



SCALE 1:20 000

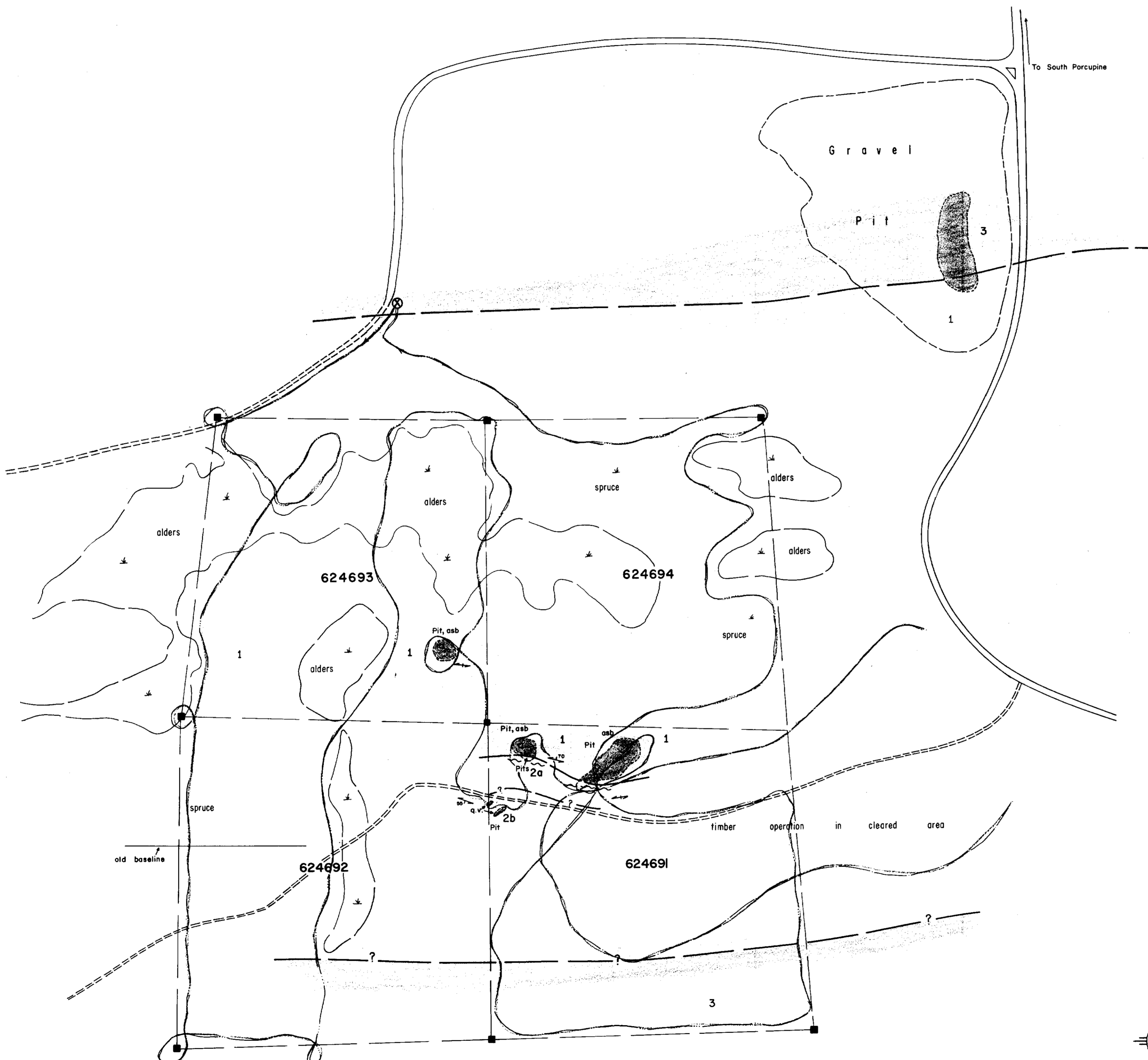
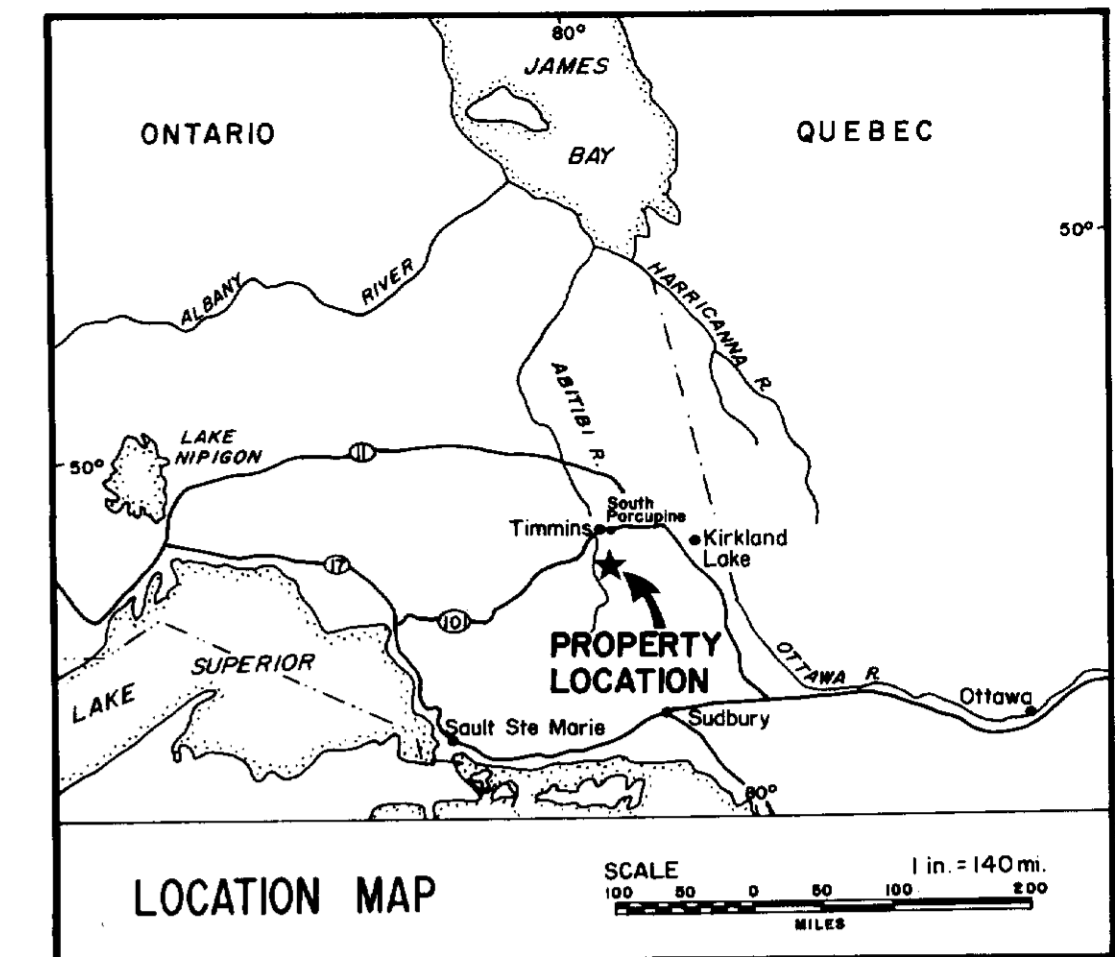
DATE OF ISSUE
NOV 22 1983
Ministry of Natural Resources
TORONTO

TOWNSHIP
SHAW
M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ministry of Natural Resources
Land Management Branch
Ontario

Date 1981
Number
G-3999

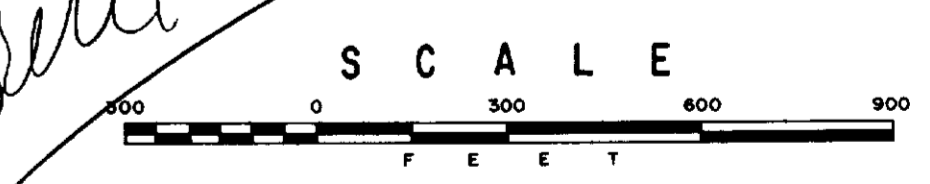




- ### LEGEND
- #### GEOLOGY
- 1 Serpentinized dunite, serpentinite
 - 2 Carbonate rocks
 - 2 a talc - magnesite rock
 - 2 b quartz - magnesite rock
 - 3 Pillowed to massive mafic metavolcanics

- #### SYMBOLS
- Rock outcrop or area of outcrop
 - 75° Schistosity (inclined, vertical)
 - Geological contact
 - ~ Shear zone
 - Trench, pit
 - ▬ Road (main, bush)
 - Claim post
 - Mapping traverses

- #### ABBREVIATIONS
- asb. asbestos
 - q.v. quartz veining



W. Brereton

SCALE
0 300 600 900
F E E T

PETROMET RESOURCES LTD.

ALLERSTON PROPERTY
SHAW TOWNSHIP, NORTHEASTERN ONTARIO

GEOLOGY

Project No. C-512	By: W.E. Brereton
Scale: 1 inch = 300 feet	Drawn: G.C.S. Limited
Drawing No. Map 1	Date: June, 1983

MPH MPH Consulting Limited

