



42A05NE0254 2.9012 CARSCALLEN

010

Geological Report

on part of the

Four Corners Option

Bristol and Carscallen Townships

NTS 42A/5

for

Esso Minerals Canada

Timmins Office
March, 1986

Joseph A. MacPherson

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MINING LANDS SECTION



42A05NE0254 2.9012 CARSCALLEN

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Summary

During October, 1985 a detailed geological survey was carried out over a group of eight claims located in Bristol and Carscallen Townships. The claims are part of a larger group currently under option from Ralph E. Allerston of Timmins.

The main units mapped were felsic to intermediate volcanics and mafic volcanics of the Godfrey Group. These are intruded to the north by a large stock of gabbroic composition. All units are fresh looking and exhibit very little alteration or sulfide mineralization, with the exception of the contact between the mafic and felsic volcanics, which is moderately carbonatized and weakly pyritic.

No further work is recommended on the property.

Introduction

A group of seven claims located in Bristol and Carscallen Townships were covered in October, 1985 by a detailed geological survey. This survey was part of a larger mapping program encompassing the outcrop areas of a group of claims currently under option to Esso Minerals Canada from Ralph Allerston of Timmins, Ontario.

The claims straddle the boundary of Bristol and Carscallen Townships at the south boundary of Turnbull and Godfrey Townships.

The claims were covered by a grid with north-south lines cut at 100 meter intervals and stations every 25 meters.

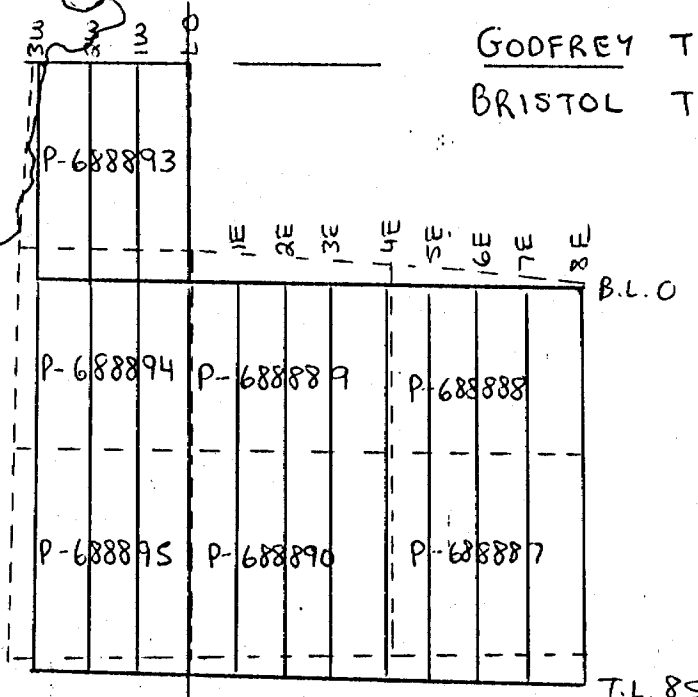
Outcrop exposure is about 10% and most of this is in the northwest corner of the map area near a small creek. Observations on the type of overburden cover and vegetation were also recorded.

The claim numbers covered in this survey are as follows: P-688887-890, and P-688893-895.

TURNBULL TWP.
CARSCALLEN TWP.



GODFREY TWP.
BRISTOL TWP.



Claim and Location Map
for
Geology Survey
Scale 1" = 1/4 mi

Property Geology

The property is underlain by a sequence of rocks interpreted to be part of the Godfrey Group of metavolcanics which is calc-alkalic in composition and locally is rich in potassium.

From north to south the rock types are: 1) Gabbro - medium to fine grained, locally weakly magnetic, 1-2% pyrite, massive, no alteration, 2) Massive, aphanitic rhyolite to locally flow-banded rhyolite with some localized patches of lapilli tuff. A trace of pyrite may be present in the rhyolite but it is essentially unmineralized and unaltered, 3) Basalt, the north contact of which is quite irregular and intruded by feldspar porphyry dykes. Numerous epidote stringers were noted and the basalt is locally magnetic. Strong but spotty carbonate alteration was also noted in the basalts, especially near the north contact with the felsic volcanics. Pyrite was also noted in amounts not exceeding 5% over a couple of feet.

The general strike of the units is 110-140 degrees and the foliation dips steeply to the north. Bedding roughly parallels the foliation.

Recommendations

The area of the basalt-rhyolite contact should be prospected and mapped in detail in order to determine the exact extent of the sulfides and the carbonate alteration. IP surveys may also be of assistance in locating areas of higher sulfide content and/or carbonate alteration.

A final phase of diamond drilling of the geological and/or geophysical anomalies generated by the above surveys should then be implemented.



Joseph A. MacPherson

geologist

March 25, 1986



Mining

900

Type of Survey(s) GEOLOGICAL		Township or Area BRISTOL	
Claim Holder(s) ESSO RESOURCES CANADA LTD.		Prospector's Licence No. T-872	
Address 120 ADELAIDE ST. W., TORONTO ONTARIO.			
Survey Company ESSO STAFF		Date of Survey (from & to) 27 09 85 02 10 85 Day Mo. Yr. Day Mo. Yr.	
		Total Miles of line Cut 7	
Name and Address of Author (of Geo-Technical report) J. MACPHERSON, ESSO MINERALS, P.O. Box 290, TIMMINS, ONT.			

Credits Requested per Each Claim in Columns at right		
Special Provisions For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
Geological	40	
Geochemical		
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)					
Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
P	688887	40			
	688888	40			
	688889	40			
	688890	40			
	688893	35			
	688894	40			
	688895	40			

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APR 28 1986
MINING LANDS SECTION

FORCIPINE MINING DIVISION
RECEIVED
APR 07 1986

Expenditures (excludes power stripping)	
Type of Work Performed	
Performed on Claim(s)	
Calculation of Expenditure Days Credits	
Total Expenditures	Total Days Credits
\$ <input type="text"/>	÷ 15 = <input type="text"/>
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.	

For Office Use Only		
Total Days Cr. Recorded	Date Recorded	Mining Recorder
275	April 7/86	<i>[Signature]</i>
	Date Approved or Recorded	Branch Director
	86/04/30	<i>[Signature]</i>

Date	Recorded Holder or Agent (Signature)
March 31/86	<i>[Signature]</i>

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 A. MACPHERSON, ESSO MINERALS CANADA, P.O. Box 290		
TIMMINS, ONT.		
Date Certified	Certified by (Signature)	
March 31/86	<i>[Signature]</i>	

Mining Lands Section

File No 2.9012

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

J. Hurst
Signature of Assessor

Apr 28/86
Date

W

April 16, 1986

File: 2.9012

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We received reports and maps on April 9, 1986 for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 688887, et al, in Bristol Township.

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 your office prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

AB/mc

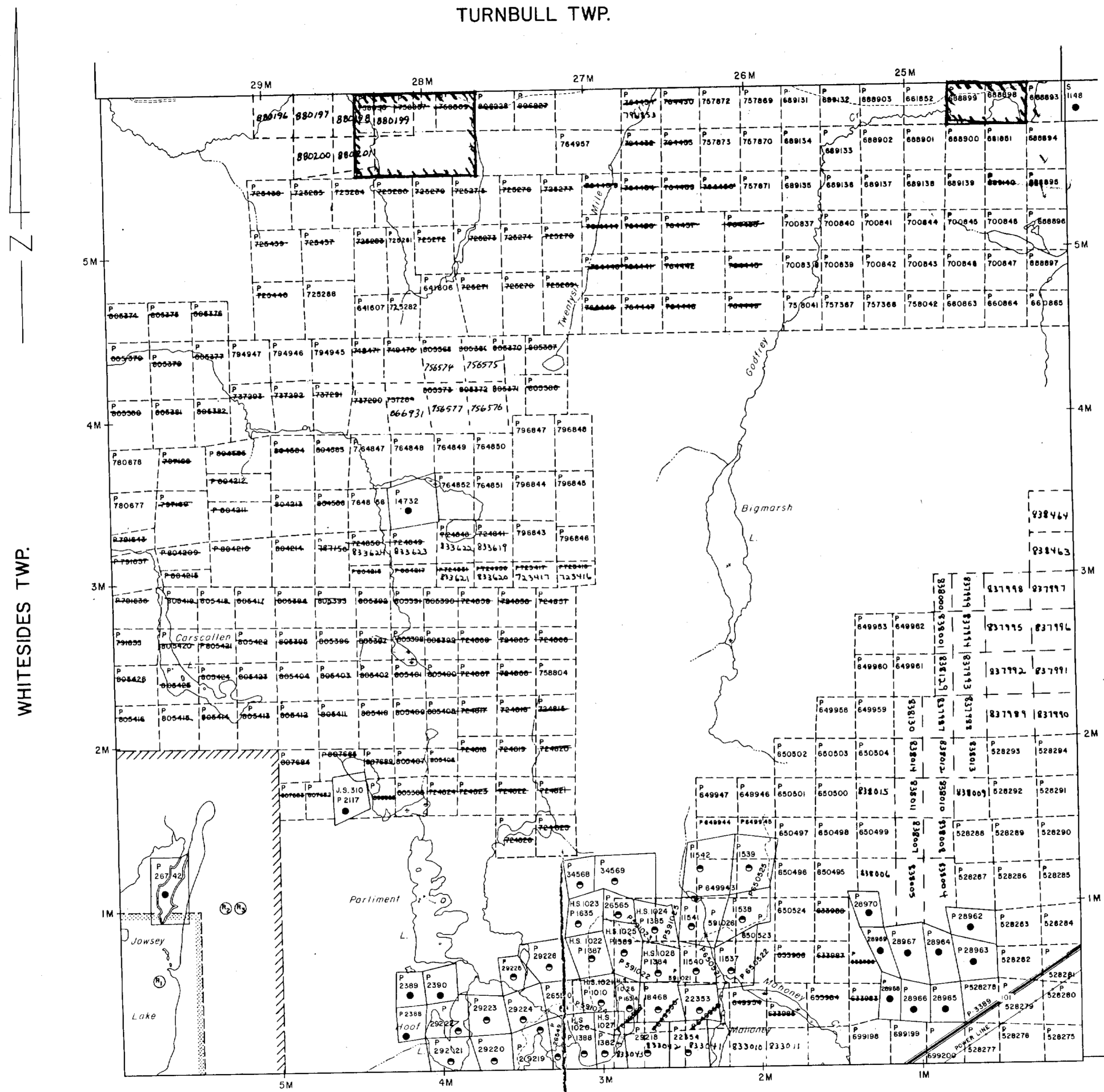
cc: Esso Resources Canada Ltd
120 Adelaide Street West
Toronto, Ontario
M5H 1S2
Attention: Joseph A. MacPherson

REFERENCES

REAS 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
42 (R.S.O. '60)			M.+S.	171608
			S.R.O.	171806
38/80	W64/83		M.R.O.	

TURNBULL TWP.



WHITESIDES TWP.

BRISTOL TWP.

DENTON TWP.

LEGEND

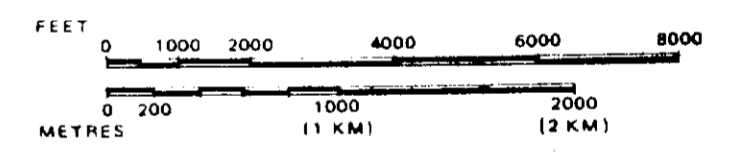
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- 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 8, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS



SITE PREPARATION MNR

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

Ministry of Land
 Natural Resources Management
 Resources Branch

Date: SEPTEMBER, 1984
 Checked Oct 3/84
 g-d
 Ralved
 Number: **G-3040**

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 FEB 18 1985
MINING DIVISION



MAP SYMBOLOLOGY

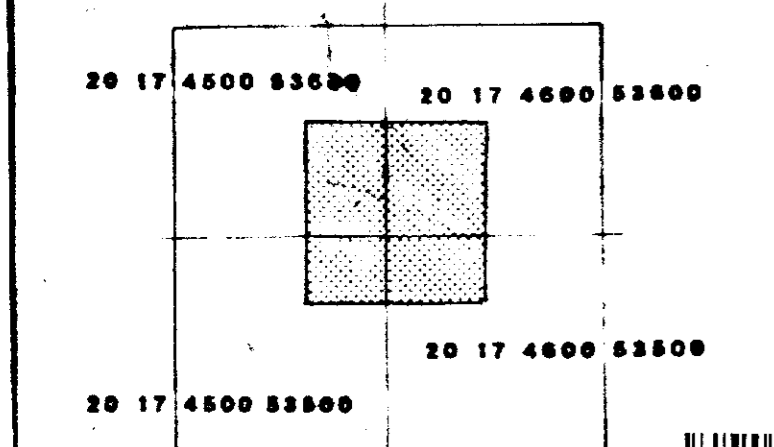
Aerial Cableway	Pipework
Boundary	Railroad
Canal	Road
Dam	River, Stream, Canal
Dike	Spot Elevation
Drainage	Tunnel
Elevation	Utility Poles
Fence, Hoop, Wall	Wharf, Dock, Pier
Feature Outline	Wooded Area
Flooded Land	
Lock	
Marsh or Swamp	
Meat	
Mine Head Frame	
Outcrop	

AREAS WITHDRAWN FROM DISPOSITION

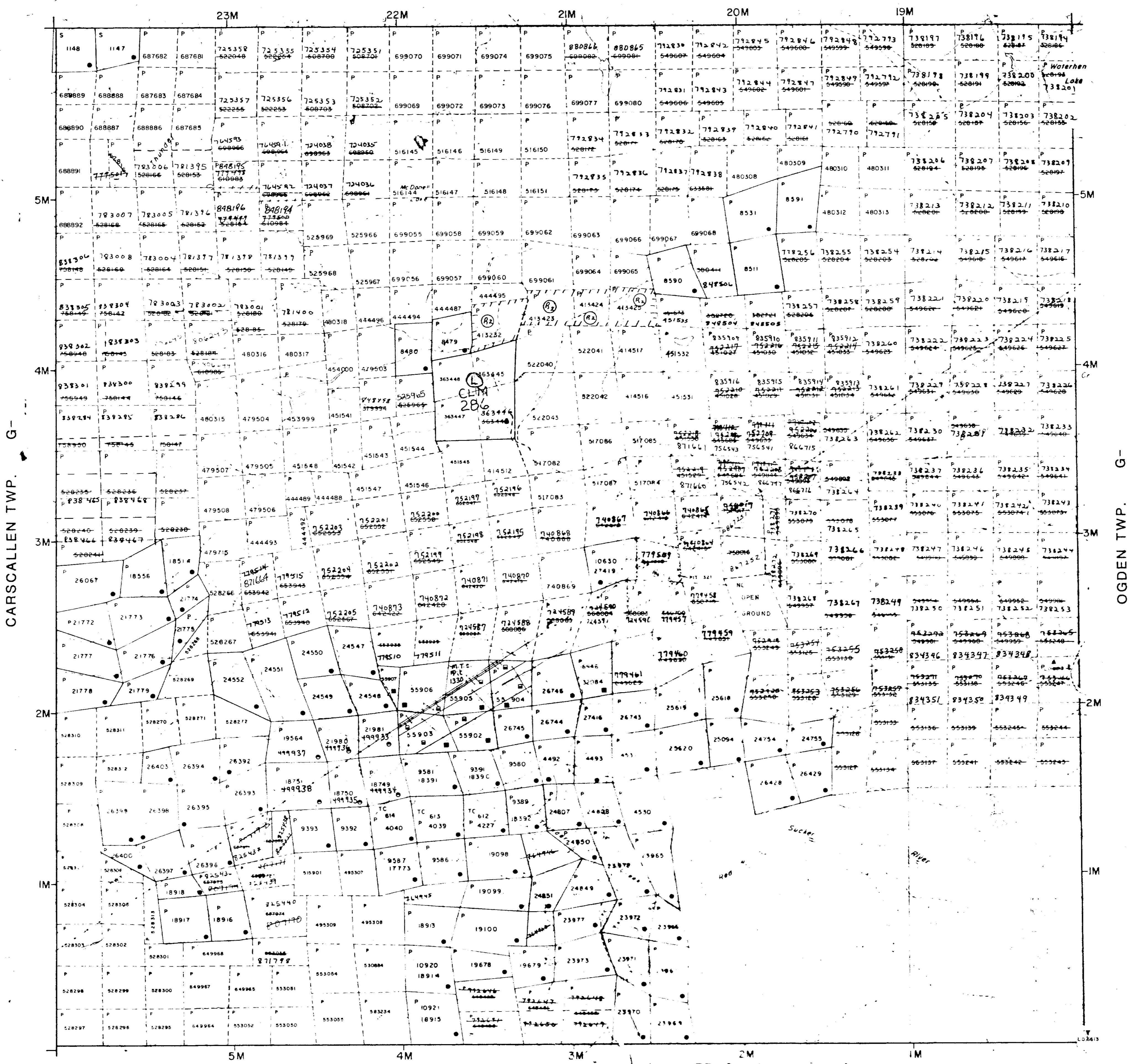
M.R.O. - MINING RIGHTS ONLY
 S.R.O. - SURFACE RIGHTS ONLY
 M+S - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
	S.R.O.	16-584		
	M+S	W-22/85	Nov-1/85	M+S, NRW37/85

KEY PLAN
For O.B.M. Map



GODFREY TWP. G-



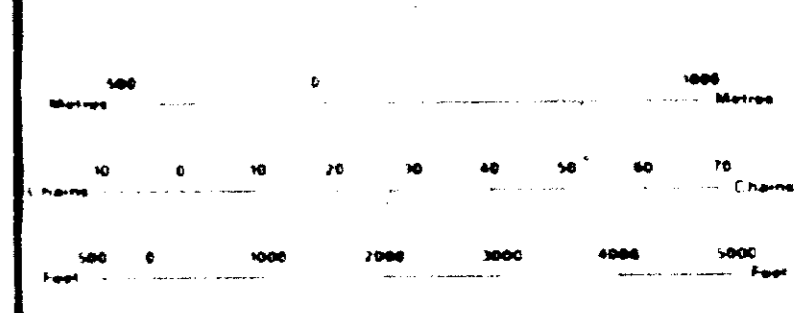
LEGEND

	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 MISKEG
	MINES
	TRAVERSE MONUMENT

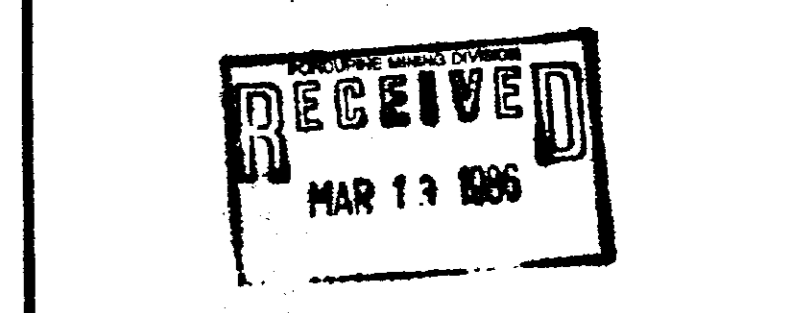
DISPOSITION OF CROWN LANDS

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 RESERVATION	◕
CANCELLED	◖
SAND & GRAVEL	◗

NOTE: MINING RIGHTS IN PARTS PATENTED PRIOR TO MAY 1, 1912, RESERVE TO THE CROWN BY THE PUBLIC LANDS ACT, R.S.O. 1910, CHAP. 180, SEC. 83, SUBSECTION 1.



SCALE 1:20 000



TOWNSHIP
BRISTOL
M+N R ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ministry of Natural Resources
Land Management Branch
Ontario

Date: JUNE, 1982
G-3998

