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REPORT ON
VLF-EM AND GEOLOGICAL SURVEYS
SKEAD TOWNSHIP, ONTARIO

By
2.1102
R.A. MacGregor, P. Eng.

December 7, 1990

RECEIVED
DEC 10 1990
MINING LANDS SECTION

INTRODUCTION

Geological and VLF-EM surveys were carried out by pace and compass lines during 1990.

LOCATION, ACCESS AND OWNERSHIP

The property is located in lot 10 Concession 6, Skead Township. There are 5 claims numbered L917302 to 917303; L918926 to 918927 and L892018. They are recorded in the name of R.A. MacGregor, 28 Ford Street, Sault Ste. Marie, Ontario.

Access to the claims is by way of old logging roads and trails from Highway 624 about 6 miles south of Larder Lake, Ontario. In dry weather it is possible to drive to within $\frac{1}{2}$ mile of the property.

PREVIOUS EXPLORATION

There are few records of previous exploration, however old pits and a shallow shaft have been located on the property indicating considerable work in the past. An airborne geophysical survey has been flown over the claims, and previous owners did some ground geophysics.

TOPOGRAPHY

The claims are a series of low rocky hills with swampy areas between. The highest area is along the south-west boundary where ultramafic rocks outcrop.

SURVEY PROCEDURE

The north and east boundary of L892018 and the north boundary of L917302 had been previously cut out. Pace and compass lines were run from these lines and along claim lines to cover the property.

GEOLOGY

The claims are underlain by a volcanic-sedimentary sequence of rocks intruded by felsic to mafic intrusive rocks. Younger Cobalt outcrop on the east side of the property and overlie the volcanics and intrusives.

Geology (Continued)

The rock succession is fine grained greywackes in the north east which appear to overlie felsic to mafic volcanics to the south west. Ultramafic to mafic volcanics lie to the southwest consisting of gabbro and serpentized ultramafics.

In the central part of the claims there is a syenite-hornblendite intrusion cutting the volcanics and sediments. There is a felsic intrusive or dyke outcropping along the west part of claims L918926.

DISCUSSION OF RESULTS

VLF-EM

There is a strong tendency for VLF-EM cross-overs to follow drift filled depressions between rock outcrops. The anomalies may be caused by overburden effects, however they also are often along assumed contacts between different rock types, the contacts also being drift covered. Further geophysical surveys by other methods and other types of prospecting are indicated.

Geology

The geology shows a volcanic-sedimentary section from ultramafic to mafic to felsic volcanics overlain by sediments and cut by a number of intrusions. Pyrite mineralization is fairly common. No base metal sulphides were noted, and the few assays taken gave low values. The geology is favourable for sulphide deposits although only pyrite was noted in the survey.

Respectfully submitted



December 7, 1990

R.A. MacGregor, P. Eng.

CERTIFICATE

I, Robert A. MacGregor, Certify:

1. I am a Mining Engineer residing at 28 Ford Street, Sault Ste. Marie, Ontario. I have worked as a mining engineer and geologist for the past 20 years.
2. I am a member of the Association of Professional Engineers of the Province of Ontario and a member of the Canadian Institute of Mining and Metallurgy.
3. I attended Queen's University for two years in the Mining Geology course.
4. I am the recorded holder of the mining claims in this report and have personal knowledge of the work performed.

Dec 7/90

Date



Robert A. MacGregor

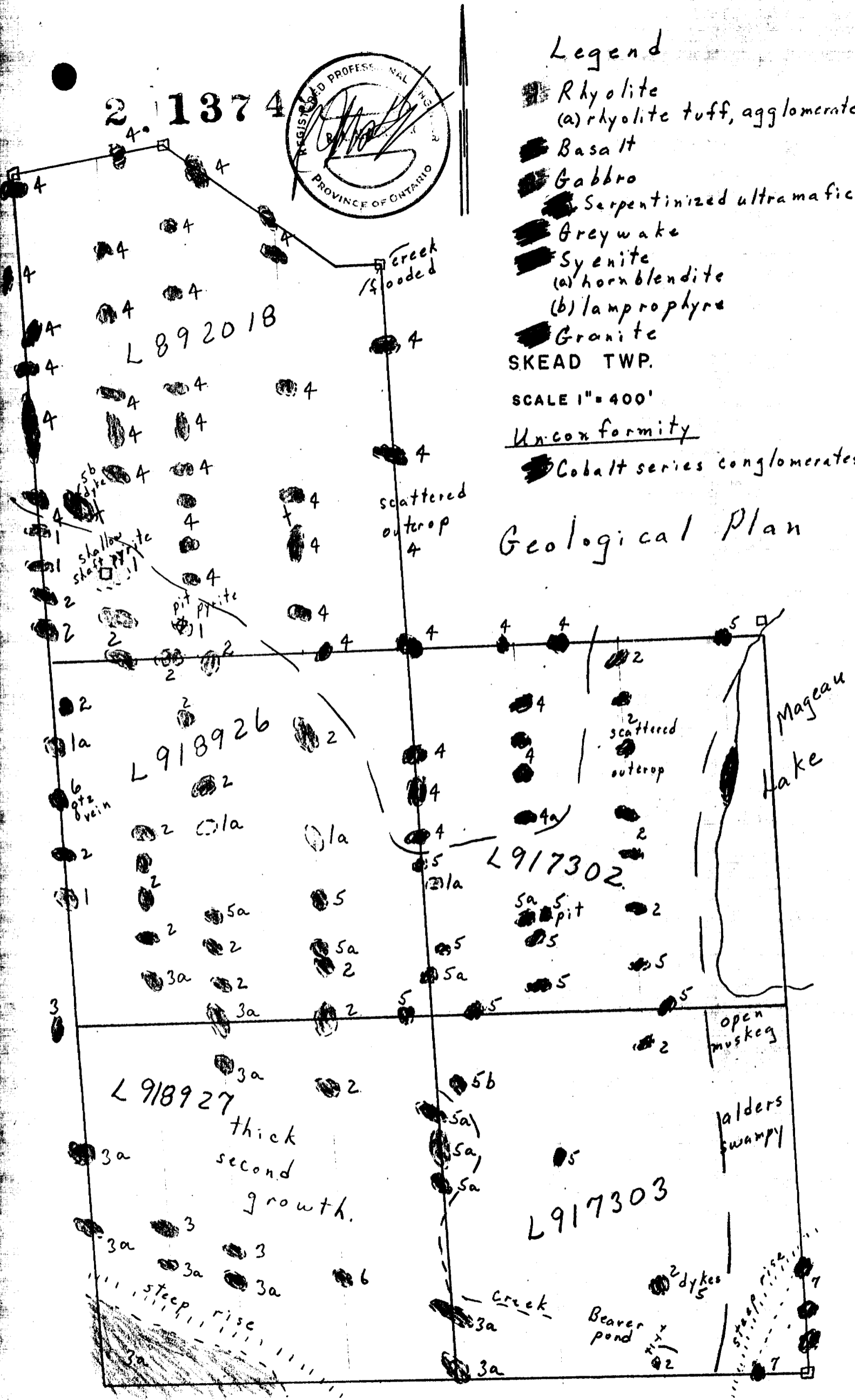
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Legend

- Rhyolite
 - (a) rhyolite tuff, agglomerate
 - Basalt
 - Gabbro
 - Serpentinized ultramafic
 - Greywacke
 - Syenite (a) hornblendite
 - Syenite (b) lamprophyre
 - Granite
- SKEAD TWP.
SCALE 1" = 400'
- Unconformity
 Cobalt series conglomerates

Geological Plan





Report of Work
(Geophysical, Geological and Geochemical Surveys)

Technical reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch:

Type of Survey(s) EM & Geological	Mining Division Larder Lake	Township or Area Skead Township
Recorded Holder(s) R.A. MacGregor	Prospector's Licence No. K15070	
Address 28 Ford Street, SAULT STE. MARIE, Ontario P6A 4N4		Telephone No. 949-5928
Survey Company Colex Exploration Inc.		
Name and Address of Author (of Geo-Technical Report) R.A. MacGregor, 28 Ford St., Sault Ste. Marie, Ont.		Date of Survey (from & to) Day Mo. Yr. Day Mo. Yr. 6 5 90 10 90

Credits Requested per Each Claim in Columns at right			Mining Claims Traversed (List in numerical sequence)					
Special Provisions	Geophysical	Days per Claim	Mining Claim		Mining Claim		Mining Claim	
			Prefix	Number	Prefix	Number	Prefix	Number
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	5.8	L	917302				
	- Magnetometer			917303				
	- Other			918926				
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	20		918927				
	Geochemical			892018				
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim						
	- Electromagnetic							
	- Magnetometer							
	- Other							
	Geological							
	Geochemical							
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim						
	Magnetometer							
	Other							
Total miles flown over claim(s).								
Date Oct. 9/90	Recorded Holder or Agent (Signature) <i>R.A. MacGregor</i>		Total number of mining claims covered by this report of work.			5		

RECEIVED
 FEB 12 1991
 ONTARIO GEOLOGICAL SURVEY
 ASSESSMENT FILES
 OFFICE

RECEIVED
NOV 09 1990

MINING LANDS SECTION

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in this Report of Work, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying R.A. MacGregor, 28 Ford St., Sault Ste. Marie, Ontario P6A 4N4			
Telephone No. 705-949-5928	Date Oct. 9/90	Certified By (Signature) <i>R.A. MacGregor</i>	

For Office Use Only

Total Days Cr. Recorded 129	Date Recorded Oct. 11/90	Mining Recorder <i>[Signature]</i>
	Date Approved as Recorded Jan 31/91	Provincial Manager, Mining Lands <i>[Signature]</i>

RECEIVED
LARDER LAKE
MINING DIVISION
OCT. 11 1990
TIME *9:00 am*



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) VLF-EM & GEOLOGICAL
Township or Area Skead Township
Claim Holder(s) R.A. MacGregor
Survey Company Colox Exploration Inc.
Author of Report R.A. MacGregor,
Address of Author P.O. Box 1110, Sault Ste. Marie, Ont.
Covering Dates of Survey 01/05/90 to 07/12/90
Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically
917302 (number)
917303
918926
918927
892018
TOTAL CLAIMS 5

SPECIAL PROVISIONS CREDITS REQUESTED
DAYS per claim
Geophysical
--Electromagnetic 5.8
--Magnetometer
--Radiometric
--Other
Geological 20
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
DATE: Dec. 7/90 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys
Table with columns: File No., Type, Date, Claim Holder

OFFICE USE ONLY

If space insufficient, attach list

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 _____

NOTES

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

SAND AND GRAVEL
OR MTC PIT NO.230

65 APPLICATION UNDER PUBLIC LANDS ACT

AREAS WITHDRAWN FROM STAKING

- R¹** Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. W-63-83
- R²** Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. W-8-85
- R³** Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. W-7-86
PART OF R3 REOPENED BY ORDER O-19/86 NOV 30/86
PART OF R3 REOPENED BY ORDER NO. O-L10/85 NR
PART OF R3 REOPENED BY ORDER O-L11/86 NR
- R⁴** Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. W-8-86
PART OF R4 REOPENED BY ORDER O-19/86 NOV 30/86
- R⁵** Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. W-9-86
Part of R5 re-opened O34/86, O33/86, O12/87
PART OF R5 REOPENED BY O 27 88 NR MAR 30/88
- R⁶** Surface and Mining Rights Withdrawn from Staking, section 36/80 order No. W-72-87
PART OF R6 REOPENED BY O-17/86 NOV 30/86

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED THOSE WISHING TO STAKE MINING CLAIMS SHOULD CON-

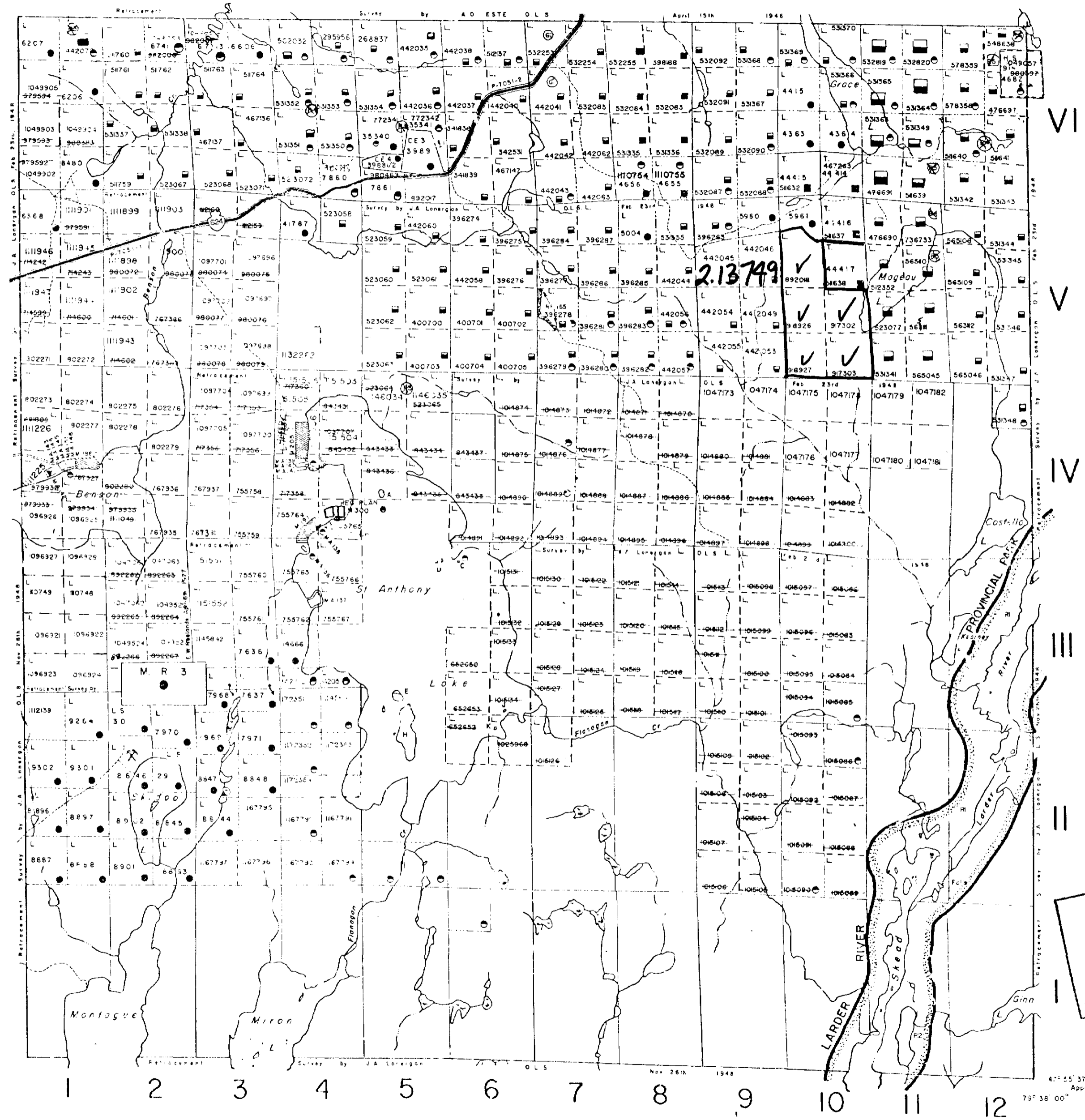


200

HEARST TP. M.354

CATHARINE TP. M.336

BAYLY TP. M.323

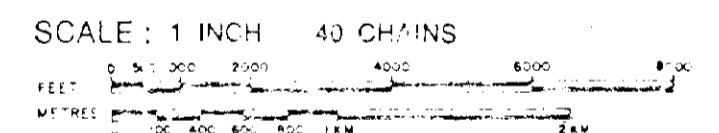


LEGEND

- 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 FIGHTS
- SUBDIVISION
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

DISPOSITION OF CROWN LANDS

- TYPE OF DOCUMENT
- PATENT, SURFACE & MINING RIGHTS
- SURFACE RIGHTS ONLY
- MINING RIGHTS ONLY
- LEASE SURFACE & MINING RIGHTS
- SURFACE RIGHTS ONLY
- MINING RIGHTS ONLY
- LICENCE OF OCCUPATION
- CROWN LAND SALE
- ORDER-IN-COUNCIL
- RESERVATION
- CANCELLED
- SAND & GRAVEL



ACRES	HECTARES
40	16

DATE OF ISSUE
DEC 8 1990
LARDER LAKE
MINING RECORDERS OFFICE

SKEAD

DISTRICT
TIMISKAMING
DIVISION
LARDER LAKE

Ministry of Natural Resources

Ontario Surveys and Mapping Branch
Date 10/4/74 Plan No.

Whitney Block
Queen's Park, Toronto
M.387