



REPORT OF THE MAGNETOMETER SURVEY  
MACGREGOR OPTION, SKEAD TWP., ONTARIO

INTRODUCTION

A programme of magnetic surveying was carried out from October 24 to November 30, 1972 on the MacGregor Option claims in Skead Township. The claims are found on claim map M387 in the Larder Lake Mining Division, District of Timiskaming, Ontario. The claims covered by this survey area:

L270383, L282843, L282852-54, L314843, L317973-78,  
L319208,09, L319212-13, L319215, L319217, L319282,  
L319821, L321180.

and L282842, L282844-51, L319214, L319216, L319286-90,  
L321178-79, L321181, L341842, L370229, L370373.

The grid consists of lines which were cut, chained and picketed every 100 feet. Lines are generally in a north-south direction. The interval between lines varies and is either 200, 300 or 400 feet. Most lines, however, are on a 400 foot interval. East-west tie lines have been cut on approximately 1,500 foot separations. In all, 55.7 line miles of lines were cut on this grid.

GENERAL

The magnetic survey was carried out using a Scintrex MF1 fluxgate magnetometer. This magnetometer detects the vertical component of the earth's magnetic field to an accuracy of 10 gammas. Diurnal variations were controlled using the looping around technique using base stations on the baselines and tie lines as control. In

this procedure the operator describes a loop in effect by starting on a line at the baseline, taking readings along that line to the end, crossing to the next line, reading along that line to the opposite end, returning to the first line and reading back to the baseline. Corrections are made in time on the intervening data on any changes occurring at the baseline reading. The operator then proceeds directly to the next line and repeats the procedure.

All magnetic readings were taken on a 50 foot interval. Both north-south lines and east-west base and tie lines were surveyed for a total production of 55.7 line miles.

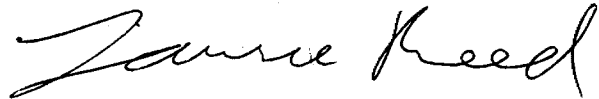
#### DETAIL

A large broad magnetic high strikes across this area in a west-northwest direction. While individual readings may exceed 15,000 gammas the feature is seen to be defined by the readings between 1,000 and 5,000 or 6,000 gammas. This magnetic high defines a large ultrabasic body seen on geologic mapping in this area. The body is seen in the magnetics to extend across the two southerly sheets. On the southeast sheet the body presents an irregular pattern of magnetization suggesting the body is broken or contorted by folding. On the southwest sheet the magnetic trends become more uniform and linear.

Away from the large magnetic body, particularly on the northwest sheet, the magnetics become fairly flat showing the ultrabasic rocks to be confined to one major fault.

CONCLUSIONS

The magnetometer survey has outlined a portion of an ultrabasic body extending in a west-northwest direction through these claims.



Laurie E. Reed, P.Eng.,  
Chief Geophysicist.

December 18, 1972  
LER/eip.





GEOPHY

32004SE0837 2.1100 SKEAD

900

2.1100

TECHNICAL DATA STATEMENT

RECEIVED

DEC 21 1972

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.

PROJECTS SECTION

Type of Survey Magnetometer  
Township or Area Skead Township  
Claim holder(s) R.A. MacGregor  
134 Palace Dr., Sault Ste. Marie, Ont.  
Author of Report L.E. Reed  
Address 55 Yonge St. 6th Floor, Toronto, Ont.  
Covering Dates of Survey Oct. 15 to Dec. 20/72  
(linecutting to office)  
Total Miles of Line cut 30.45 Line Miles

842 = 949-4250 366 795

MINING CLAIMS TRAVERSED  
List numerically

L (prefix)	(number)
L	270383
L	282843
L	282852 <sup>1/4 NOT covered</sup>
L	282853 <sup>1/4</sup>
L	282854 <sup>1/2 Let rest of survey</sup>
L	311843 <sup>is well covered</sup>
L	317973
L	317974
L	317975
L	317976
L	317977
L	317978 <sup>1/4</sup>
L	319208
L	319209
L	319212
L	319213
L	319215
L	319217
L	319282
L	319821 <sup>28</sup>
L	321180

If space insufficient, attach separate sheet

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 (40) DR  
-Radiometric  
-Other  
Geological  
Geochemical

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

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: Dec. 21/72 SIGNATURE: James Reed  
Author of Report

PROJECTS SECTION

Res. Geol. \_\_\_\_\_ Qualifications 2.62  
Previous Surveys 63.1370 (air) L.D

Checked by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

TOTAL CLAIMS 21

OFFICE USE ONLY

**GEOPHYSICAL TECHNICAL DATA**

**GROUND SURVEYS**

Number of Stations 1607 Number of Readings 3060  
Station interval 50 feet  
Line spacing 200, 300 and 400 ft.  
Profile scale or Contour intervals 1000 gammas  
(specify for each type of survey)

**MAGNETIC**

Instrument Scintrex MF1  
Accuracy - Scale constant 10 gammas  
Diurnal correction method Variations in base readings corrected for drift in time  
Base station location Series of bases on base and tie lines are tied together during survey

**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 \_\_\_\_\_

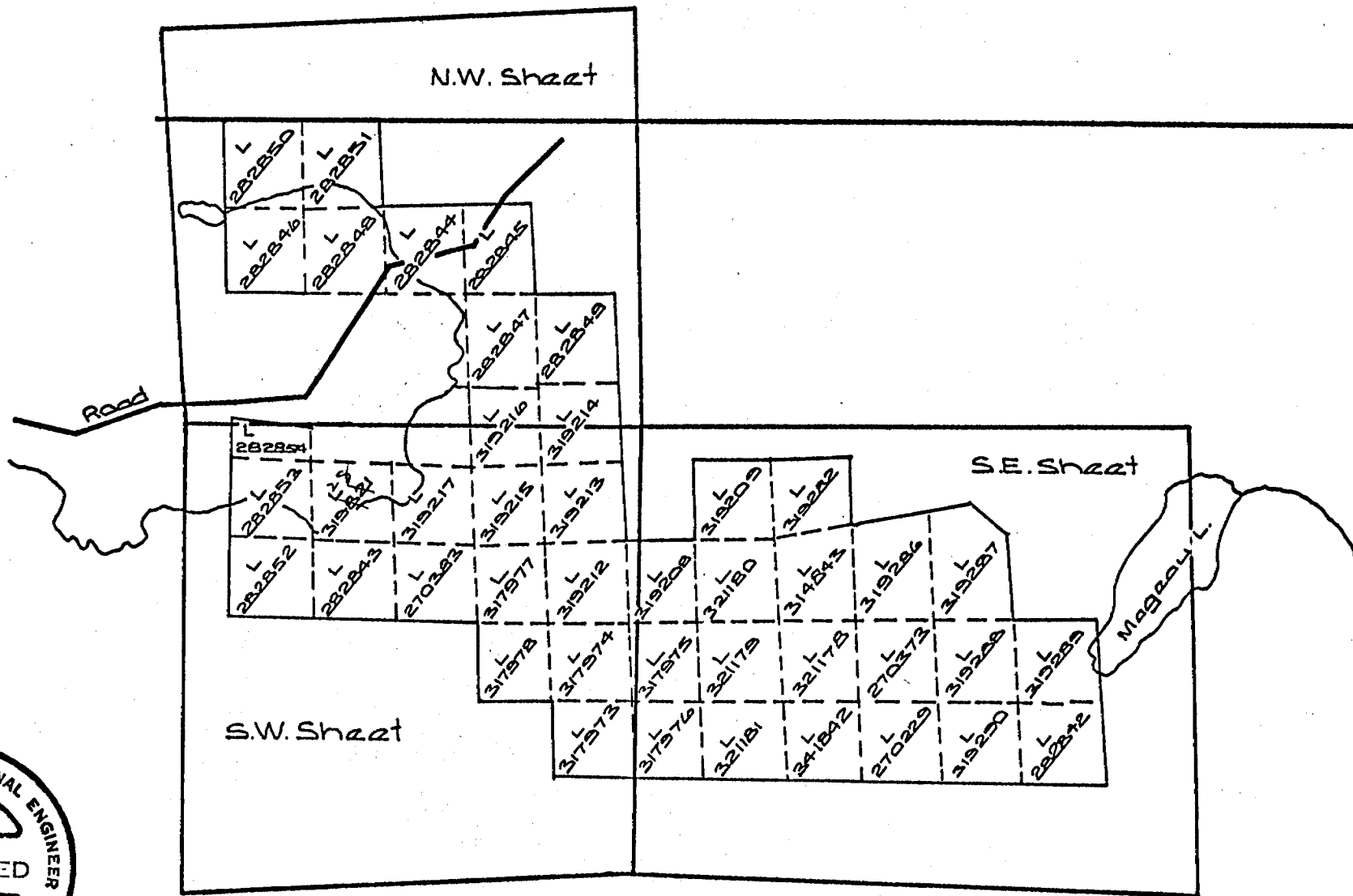
Elevation accuracy \_\_\_\_\_

**INDUCED POLARIZATION - RESISTIVITY**

Instrument \_\_\_\_\_  
Time domain \_\_\_\_\_ Frequency domain \_\_\_\_\_  
Frequency \_\_\_\_\_ Range \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_



*Jane Reed*



LOCATION MAP

LARDER LAKE MINING DIVISION

Scale: 1" = 1/4 mile

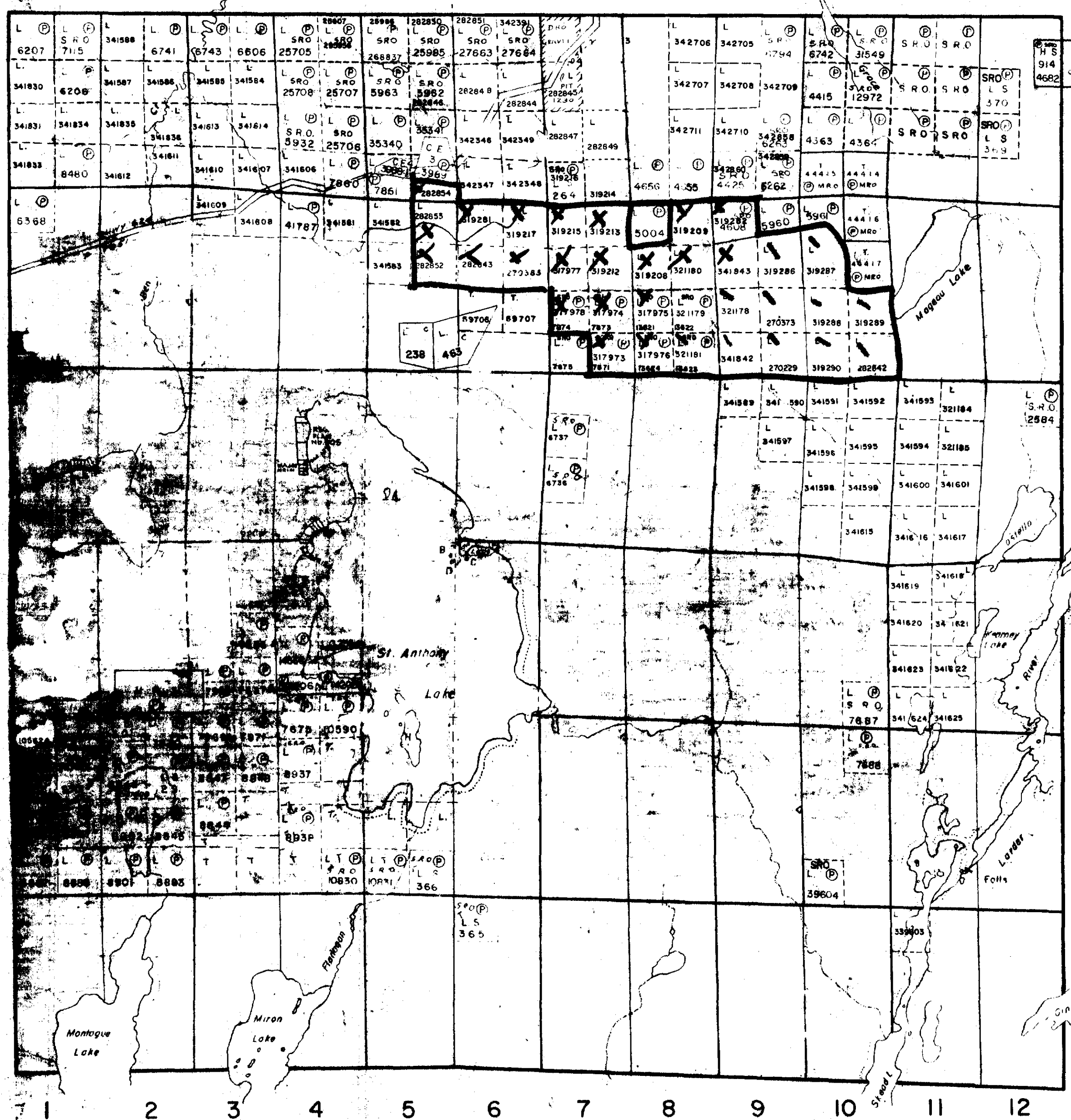
W. 385 M

2.3699 Twp.

W. 385 M

Catharine Twp. M. 336

Hearst Twp. M. 354



Bayly Twp. M. 323

VI

V

IV

III

II

I

Ratray Twp. M. 384

THE TOWNSHIP OF

**SKEAD**

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

**LEGEND**

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSHES
- MINES
- CANCELLED

**NOTES**

400' Surface rights reservation around all rivers and rivers

All unpatented claims accepted subject to survey, Section 110 of the Mining Act

Con. line between Cpn. II & Cpn. III Lot 3 shown north of the actual position as laid out on the ground.

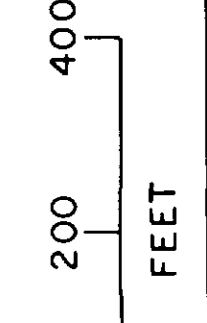
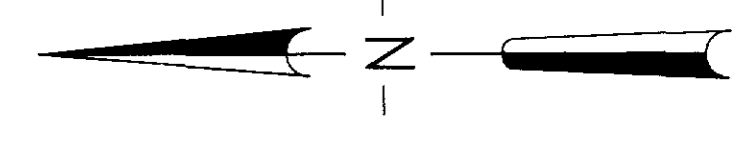
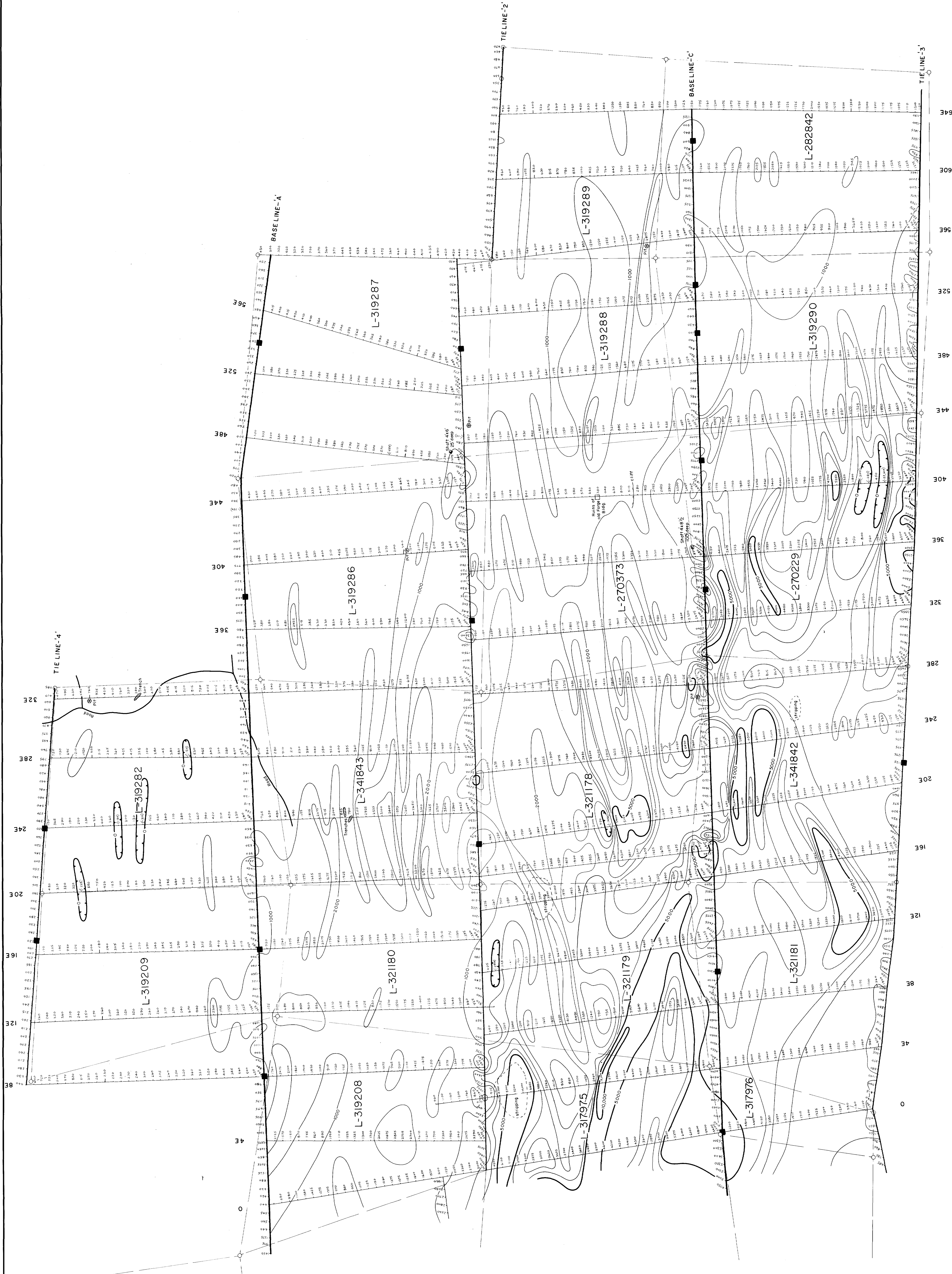
DATE OF ISSUE  
 DEC 2 1972  
 ONT. DEPT. OF MINES  
 AND NORTHERN AFFAIRS

2.1100

PLAN NO. - M. 387

ONTARIO DEPARTMENT OF MINES AND NORTHERN AFFAIRS





**LEGEND - MAGNETIC BASE STATION - ■**  
**MAGNETOMETER INSTRUMENT**  
 TYPE: SCINTREX MF-1 FLUXGATE (Vertical Field)  
 Readings in Gammas: [Symbol]  
 Base: [Symbol]  
 Contour Interval: Every 1000 Gammas to 5000 Gammas,  
 every 5000 Gammas hereafter. Profile: [Symbol]





**ESELCO MINING CORPORATION**  
 (EXPLORATION DIVISION)  
**SK EAD AREA**  
**MacGregor Option**  
 MAGNETOMETER SURVEY  
 S.W. SHEET  
 DRAWN BY: C.S. DATE: DECEMBER, 72  
 TRACKED BY: J.M. SM. 930



**MAGNETOMETER INSTRUMENT**  
 TYPE: SCINTREX MF-1 FLUXGATE (Vertical Field)  
 Readings in Gammas:  
 Base: 1000  
 Profile: 5000  
 Contour Interval: Every 1000 Gammas to 5000 Gammas, every 5000 Gammas thereafter.

