

ROY J. RUPERT
CONSULTING GEOLOGIST

28 WELCOME AVENUE
SAULY STE. MARIE, ONTARIO

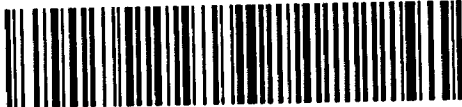
PHONE (705) 254-4130

RECEIVED

MAY 13 1974

PROJECTS UNIT

2.1480



41105SE0013 0013B1 LORNE

010

MAGNETIC SURVEY
OF
ULCH PROPERTY
LORNE TOWNSHIP
DISTRICT OF SUDBURY
SUDBURY MINING DISTRICT
ONTARIO

APRIL 23, 1974.

PROPERTY & OWNERSHIP

This report presents the results of work on a group of 13 claims numbered 323090, 323092 to 323101 inclusive, 323156 and 323157, recorded in the name of Albert Chayer, 64 George St., Sault Ste. Marie. In addition, the survey was extended to include coverage of 10 claims numbered 396940 to 945 inclusive, claim nos. 396951, 396952, 396954, 396955 and parts of 3 claims numbered 396946, 396950 and 396953. The latter group of claims is registered in the name of Mr. Guy Desmarais, Spanish, Ontario.

LOCATION & ACCESS

The property is located in the southwest corner of Lorne Tp., about 3 miles southeast of the village of Nairn Centre, Ontario. The property is about 1½ miles from Highway 17. In summer, it may be reached by boat via the Vermillion River and Ella Lake from landings on the north shore of the Vermillion River.

PREVIOUS EXPLORATION

The present and previous recorded holders of part of this property, Messrs. H. Ulch and A. Chayer have prospected and exposed several nickeliferous sulphide showings, mainly on claim number 323096. Their work has been restricted to prospecting and trenching.

GEOLOGY

Nairn and Lorne Townships were mapped by R. M. Ginn for The Ontario Department Of Mines in 1965. O.D.M. Map 2062 and Geol. Rept. No. 35 summarize the geology of the area.

The property is underlain by arenaceous clastic rocks of The Huronian Supergroup which are intruded by basic igneous rocks. Nickel bearing sulphide occurrences are present in parts of some of the basic intrusive units.

On a regional basis, three major types of basic intrusives are recognized by Ginn; Lower Proterozoic matagabbros of the "Sudbury Gabbro" group, Lower Proterozoic diorites and gabbros of the ore-bearing Sudbury Nickel Irruptive, and late-stage Olivine diabases of Middle Proterozoic Age. The Worthington offset of the Sudbury Nickel Irruptive extends towards the property and has been mapped to a point within 3½ miles north of the property.

The purpose of this survey is to help define and distinguish the basic intrusive units on the property, and to locate sulphide concentrations in them.

CONDUCT OF SURVEY

The writer has undertaken the conduct of this survey subject to agreements with the recorded holders of the claims. This survey was conducted between March 11, 1974 and April 23, 1974.

CONDUCT OF SURVEY (Cont'd.)

The instrument used was a hand held McPhar Model M700 Fluxgate Magnetometer with an effective sensitivity of about 10 gammas. Readings to determine the variation in the vertical component of the earth's magnetic field relative to a base station were taken along picket lines at 100 foot intervals, with closer spacing of readings at 50 foot intervals or on unpicketed intermediate lines where warranted by anomalous conditions.

Because diurnal variation of the earth's magnetic field was insignificant (less than 50 gammas during any one day) on the days when the magnetometer readings were taken, no corrections for this error were applied to the results. Where base station readings deviated more than 50 gammas from day to day, a daily correction was applied.

During the survey, a total of 19.3 miles of picket lines at 400 foot intervals were established. A statistical summary of the work done follows.

PROPERTY	ULCH PROPERTY		NEW CLAIMS DESMARAIS PROPERTY	TOTALS
	13 SPECIFIED CLAIMS	OTHER CLAIMS		
Feet of Picket Line	60,650	3,600	37,700	101,950
Feet of Compass Line	10,500	0	3,500	14,000
No. of Stations	612	67	377	1,056
No. of Readings	1,092	67	675	1,834

RESULTS, CONCLUSIONS AND RECOMMENDATIONS

Results of the survey are plotted and contoured on the accompanying plan, and two areas of significant anomalies have been located, as indicated on the plan.

Anomaly A on claims 396945, 396946 and 396951 has a length of over 1200 feet and a half-width of 50 feet or less. It appears to be due to an elongate narrow concentration of magnetite or pyrrhotite. The northeasterly trend is roughly parallel to the trend of the Worthington Offset, and in line with it. Outcrops at this locality indicate the presence of basic intrusives with breccia textures. Detailed ground investigation of outcrops is recommended.

A group of anomalies labelled B₁, B₂ and B₃ is present in an area on the southeast part of the claims mapped by Ginn as metagabbro.

Anomaly B₂ on claim 323096 coincides with the known sulphide occurrences pitted and trenched by Ulch and Chayer. The anomaly is less than 300 feet long and indicates no apparent immediate extension of the known sulphide zone.

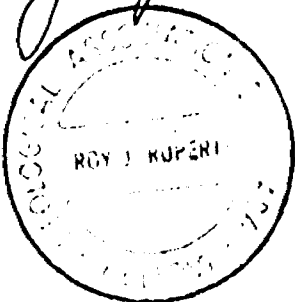
Anomaly B₁ on claim 323092 and 323096 is on the northeast edge of an irregular metagabbro body. The profile across the anomaly indicates a structure with a moderate southward dip. It is likely due to a magnetite or ilmenite-rich phase at the base of the basic intrusive, but there is a slight possibility that it may be related to disseminated sulphides similar to those exposed at B₁. The latter possibility should be checked by detailed ground examination of outcrops in the area.

Anomalies B₂, B₄ and B₅ on the boundary of claims 323096 and 323101 lie at the south edge of the same intrusive. All three are caused by narrow and short geological units. Their attitudes are poorly defined despite the closely spaced readings taken in this area. The cause of these anomalous zones is likely similar to the cause of anomaly B₁, and outcrops in the area should likewise be carefully examined.

Anomaly C on claims 396950, 951, 954 and 955 is caused by an olivine diabase dyke shown on Ginn's map.

Anomalies D₁, D₂ and D₃ have the same strike as anomaly C, and are probably caused by narrow olivine diabase dykes of the same swarm.

Detailed ground investigation of anomalies A, and B₁ to B₅ inclusive is recommended to determine the exact nature of the ultrabasic rock outcrops mapped by Ginn at these localities.

Roy J. Rupert


**ROY J. RUPERT
CONSULTING GEOLOGIST**

**28 WELCOME AVENUE
SAULT STE. MARIE, ONTARIO**

PHONE (705) 254-4130

CERTIFICATION

I, Roy J. Rupert of 28 Welcome Avenue, Sault Ste. Marie, Ontario, certify:


1. I am a graduate of Queen's University, Kingston, Ontario, and hold the degree of Bachelor of Science (Applied) in Geological Engineering from that University and the degree of Master of Science (Applied) in geology from McGill University in Montreal.

2. I have been a practising geologist for 11 years, a consultant since January 1974, and for 4 years previous to that time, resident geologist in Sault Ste. Marie for The Ontario Ministry Of Natural Resources.

3. I am a Professional Engineer registered with The Association Of Professional Engineers Of Ontario, a fellow of The Geological Association of Canada and a member of The Canadian Institute of Mining & Metallurgy.

4. This survey and report was conducted under my supervision, and I was personally present on the property for two days during the survey.

Sault Ste. Marie, Ontario.
April , 1974.



ROY J. RUPERT



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900

File 21480

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.

RECEIVED
MAY 13 1974
PROJECTS UNIT

Type of Survey Magnetometer - Geophysical
Township or Area Lorne Tp., Sudbury Mining Dist.
Claim holder(s) A. Chayer
64 George St., Sault Ste. Marie
Author of Report Roy J. Lupert
Address 28 Welcome Ave., Sault Ste. Marie
Covering Dates of Survey March 11th to April 23, 1974
(linecutting to office)
Total Miles of Line cut 19.3

MINING CLAIMS TRAVERSED	
List numerically	
S	323090 ✓
(prefix)	(number)
S	323092 ✓
S	323093 ✓
S	323094 ✓
S	323095 ✓
S	323096 ✓
S	323097 ✓
S	323098 ^{1/4 N.C.}
S	323099 ^{1/3 N.C.}
S	323100 ✓
S	323101 ✓
S	323156 ^{1/4 N.C.}
S	323157 ✓
TOTAL CLAIMS <u>13</u>	

If space insufficient, attach list

<u>SPECIAL PROVISIONS</u> <u>CREDITS REQUESTED</u>	Geophysical	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	- Electromagnetic	<u>40</u>
	- Magnetometer	<u>20</u>
	- Radiometric	
ENTER 20 days for each additional survey using same grid.	- Other	
	Geological	
	Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)
DATE: April 23, 1974 SIGNATURE: Roy J. Lupert
Author of Report or Agent

PROJECTS SECTION
Res. Geol. _____ Qualifications on this file
Previous Surveys 63A159 Geological survey
Checked by _____ date _____
GEOLOGICAL BRANCH _____
Approved by _____ date _____
GEOLOGICAL BRANCH _____
Approved by _____ date _____

OFFICE USE ONLY L.O

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 612 Number of Readings 1092
Station interval 100' (50' in anomalous areas)
Line spacing 400' (200' " " " ")
Profile scale or Contour intervals 500 Gammas
(specify for each type of survey)

MAGNETIC

Instrument McPhar M700 Fluxgate Magnetometer
Accuracy - Scale constant Effective Sensitivity 10 Gammas
Diurnal correction method Diurnal Variation Not Large Enough To Warrant Correction, Applied Daily Correctio
Base station location L 12 E, 11 + 05 North - on Shore Line

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

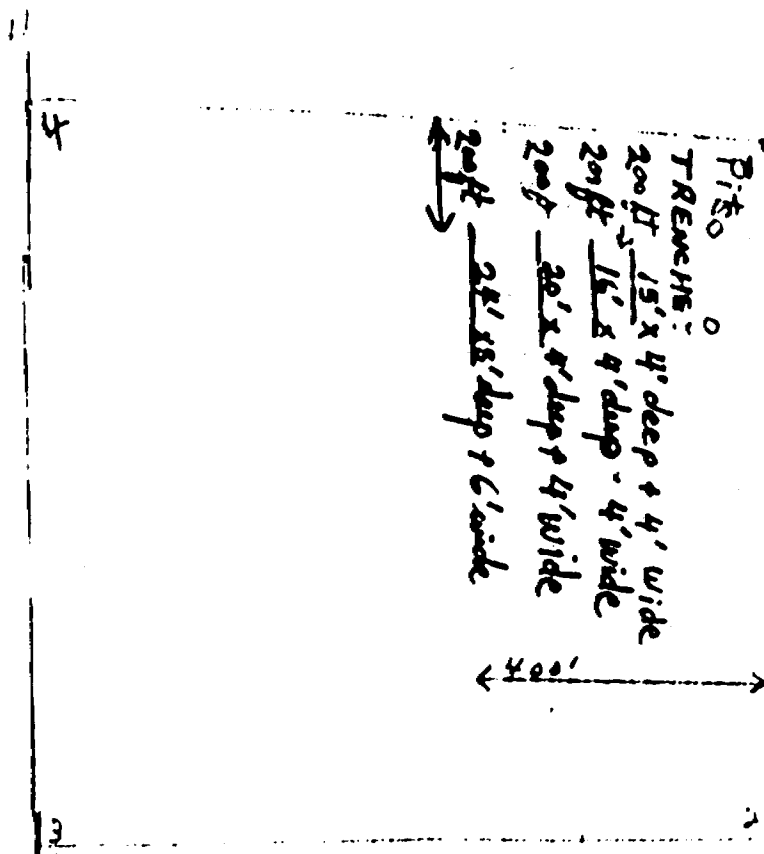
Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION (IP) SURVEY

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

ALBERT CHAYER
 SKETCH OF TRENCHING OPERATION
 ON CLAIM NO. 323096
 LORNE TOWNSHIP



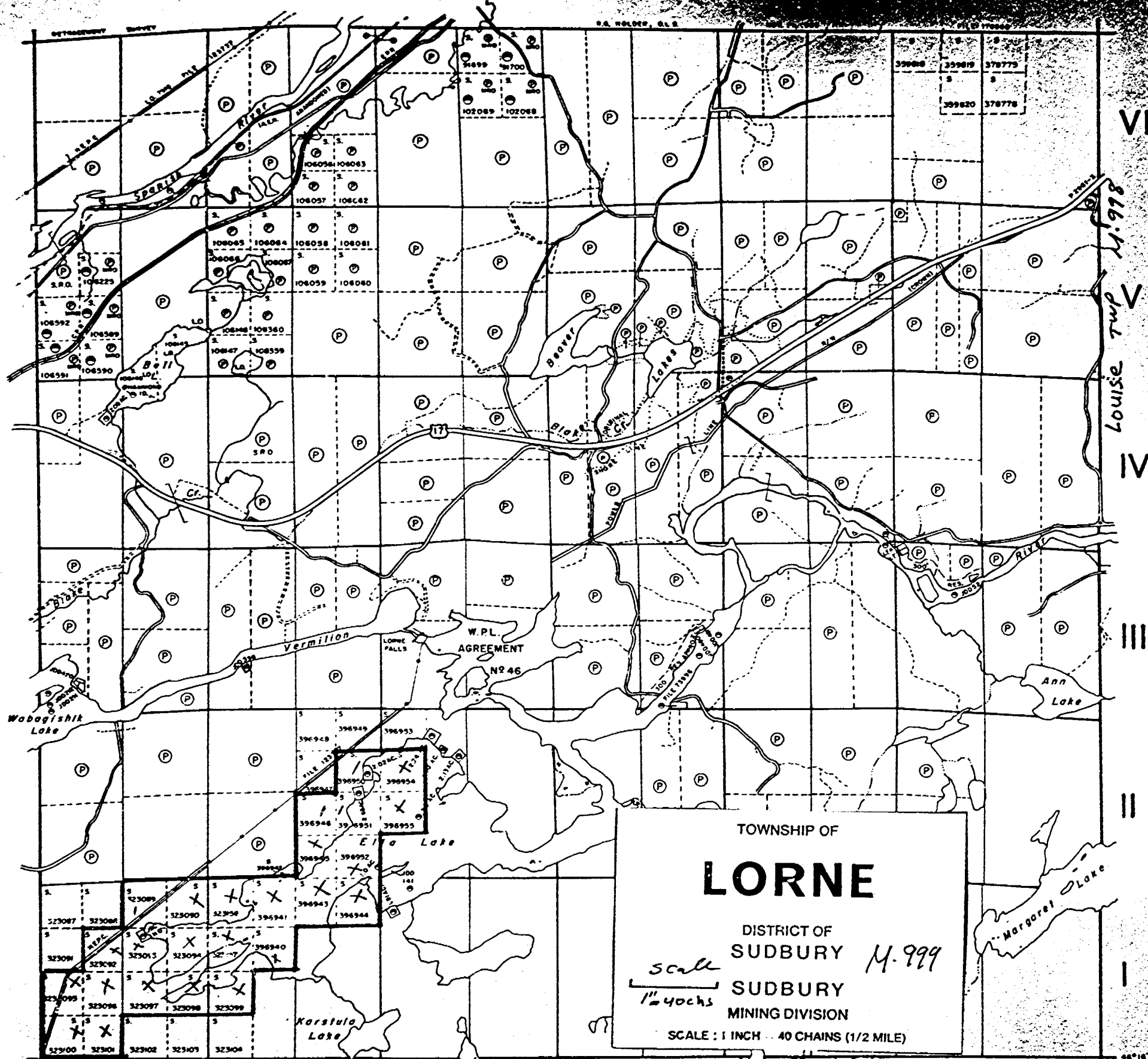
No of Pits 2
 No. of Trenches 4

Scale 4" = 1/4 mi.

DRURY TWP. M.765

NAIN TWP M.883

TRUMAN TWP. M.1164

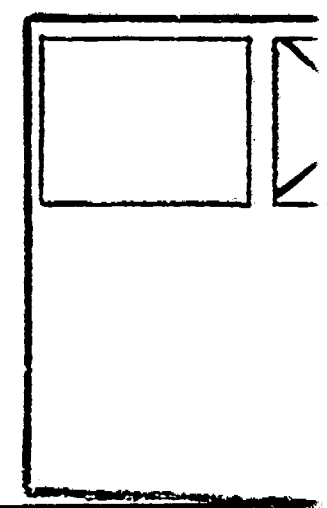


TOWNSHIP OF
LORNE
 DISTRICT OF
 SUDBURY M.999
 SUDBURY
 MINING DIVISION
 SCALE : 1 INCH = 40 CHAINS (1/2 MILE)

SEE AC
 MAP(S) I

 LORNE.

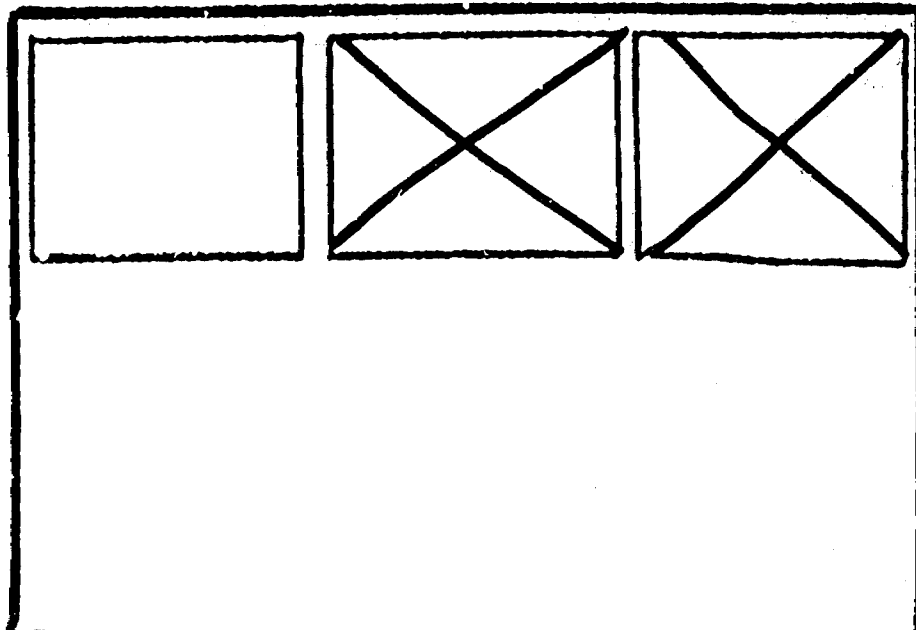
LOCATED
 CHANNEL I
 SEQUENCE

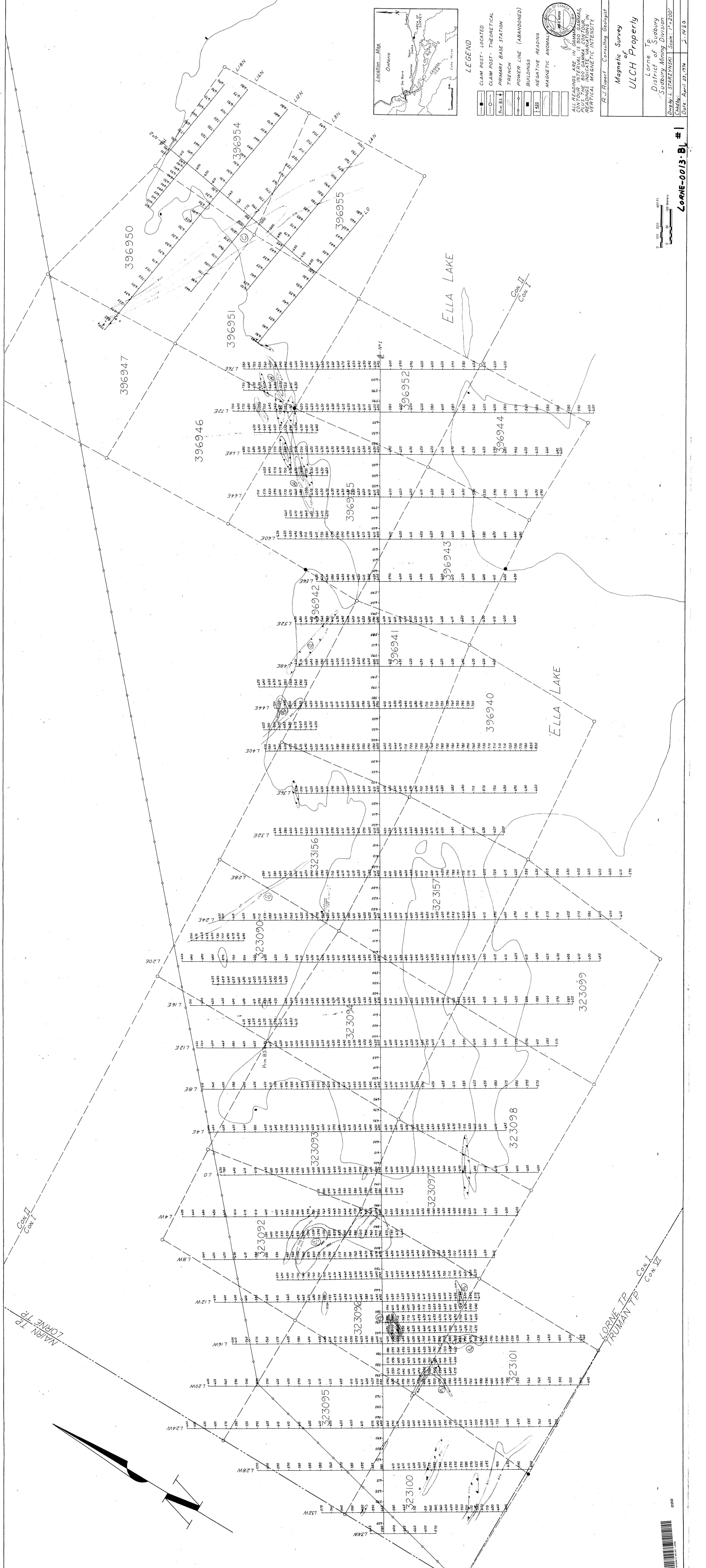


SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

LORNE-0013-B1 #1

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)



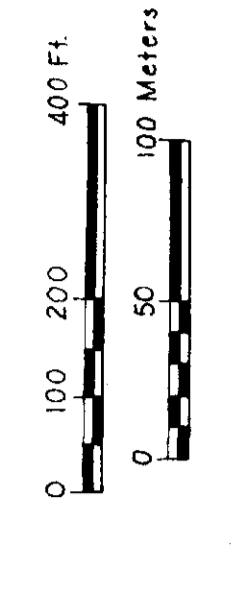


LEGEND

- CLAIM POST - LOCATED
- CLAIM POST - THEORETICAL
- PRIM. BS. I
- TRENCH
- POWER LINE (ABANDONED)
- BUILDINGS
- NEGATIVE ANOMALY
- MAGNETIC ANOMALY

ALL READINGS ARE IN GAMMA GAUSS. READINGS INDICATE VARIATIONS IN VERTICAL MAGNETIC INTENSITY.

R.J. Robert - Consulting Geologist
 Magnetic Survey
 of
 ULCH Property
 Lorne Tp.
 District of Sudbury
 Sudbury Mining Division
 Drawn by: Z. STARYNSKI Scale: 1"=200'
 Date: April 23, 1974 J.N.S.D.



LORNE-0013-BJ #1

