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RECEIVED
 THE CHIEF GEOPHYSICIST
 BRITISH COLUMBIA
 STATIONER GENERAL, BRITISH COLUMBIA
 (270-1100000-11-11)
 BRITISH COLUMBIA
 VICTORIA, BRITISH COLUMBIA
 CANADA

May 24th, 1974.

CANA EXPLORATION CONSULTANTS LIMITED

2.1485

A. S. Payne & Company,
Suite 626,
12 Richmond Street East,
Toronto, Ontario

Attention of G. L. S. Payne, P. Eng.

Dear Sirs:

This report describes the results of a program of magnetic
and electromagnetic surveying, carried out by W. J. Sharpe, Geophysical
Contractor, on a group of 12 claims known as E. J. Rivers' claims,
Consolidated Resources Project Ltd. (Beneficial option), Bernardi
Carletonville Township, Thunder Bay Mining Division, Ontario,
Canada.

PROPERTY, LOCATION AND ACCESS

The 12-claim group covers a block of ground, three claims
east-west and four claims north-south. They are numbered 1, 824314
to 1, 824325, inclusive.

According to Ontario government claim maps, Claims
1, 824321 to 1, 824325, inclusive, (5 claims) are in Carletonville Town-
ship and Claims 1, 824314 to 1, 824320, inclusive, (8 claims) are in
Bernardi Township with the north-south Bernardi-Carletonville Town-
ship line providing a common boundary for the two sets of claims.

This Carletonville-Bernardi Township line was not found by
the line cutters and geophysical operators while working in the field.

They have found all the outcrop points but located only three of the six
in the group.

The location is at the north part of the above said township
and a certain distance from the common corner of the two town-
ships.

Access to the property was made by car along a road which
was used by them and others from the station on the northward
highway, and then by snowshoes along a partly new winter trail,
and eventually for about ten miles to the northeast corner of the prop-
erty.

As discussed, and for various reasons to be described in
the following sections regarding topography and magnetic data, the
property could be the site of one claim to the north of its re-
corded location.

Geology of the area (see also page 11)

Geology of the area and economic geology of the claim group
has been well described by you in your report dated December 31, 1973.

Further geology, such as given on map 2133, C. D. 100, and
the compilation made by you upon opening your report, indicate that
the claim group is underlain mainly by pillow basalt and andesite,
interbedded with massive granitic type of the latter, including some
schists, gneiss, hornblende gneiss, and located to the immediate north

of an old gold shaft fully described by you, in a zone of andolinite, although the shaft was sunk on an outcrop of altered basalt. All of these observations are in accordance with the exception of a north-southly strike and zone of andolite, an outlier to the southeast.

Field observations show that the north and central parts of the property have mainly a terrace and lacustrine sediments (sand and clay between excellent bedrock exposures). The southern part is covered by drift, thin to medium, rock crops with fill or sandy gravel till, bedrock poorly exposed.

Topographic features and outcrop areas noted by the geophysical operators are depicted on the plan accompanying this report. These indications are by no means precise and in fact relatively rough as compared with what other operators can do under the same snow conditions. Nevertheless, the general features when correlated with the above-mentioned geological maps indicate that the northeasterly water course from the property to Little Green River is likely to be located in Grid 7, 324314; the outcrop area located between 1360 to 1370, inclusive, and below about 600' north, are likely to be the outcrop areas noted to the immediate south of the old gold shaft. No outcrop was noted to the direct south of this area.

As reported to you previously, the above features suggest that the old gold group is located about one mile to the south of its recording. This is now being confirmed by the recently spotted location of the old shaft by a road south of the line shown.

MAGNETIC DATA

The ground magnetometer survey data when contoured showed a series of magnetic zones with readings from 2000 to about 6000 gammas against backgrounds in the order of 1000 gammas. When assuming a shift of one claim to the south, the general patterns of the high and low zones are similar in many ways to that shown on Aeromagnetic Map 205G (Rev.), G. S. C., at the property area.

The aeromagnetic map indicates that there is a unique but small magnetic depression at the central part of the claim group and a strong magnetic zone which runs west-northwesterly across the south part of the claim group along an anticlinal axis. Geological maps showed the occurrences of ultrabasic rocks, granular basic and intermediate volcanics and also a rather large outcrop area of agglomerate and breccia along this axis. The area of agglomerate and breccia is indeed much larger than the similar but smaller zone located near the old shaft but appears to be off to the immediate southeast of the claim group. The fact that this large area of agglomerate and breccia is located along an anticline a short distance from the large Winnie Lake Algomian acidic intrusive, suggests a good possibility for the introduction of gold mineralization. One would expect these rocks to be less magnetic than the others known in the vicinity, except for the possible association with magnetic minerals.

For similar reasons, one would expect the silicified brecciated zone found at the cross cut of the old shaft to be less magnetic than the

country rock of altered basalt; but since the zone is only 15' wide and the field crew failed to locate the shaft for detailed readings, the readings at 100' intervals can easily miss the zone.

The ground magnetic survey did encounter a slightly lower magnetic area to the immediate north of the outcrop areas noted to the south of the location of the gold shaft which is within lower ground. The highest magnetic contrasts here are at 750' N, L34W and 650' N, L36W. The silicified zone may well be located near these points, but its indicated strike depends on its exact location and, of course, detailed readings across the immediate area. To the immediate east of the old shaft, the magnetic zone turns southeasterly parallel to a magnetic low zone to the northeast. This is inferred as being cut by a north-northwesterly cross fault.

About 400' to 500' to the south, there is a small magnetic low zone which is apparently the strongest low anomaly encountered by the survey. It strikes southeasterly from about 300' N, L36W, to 200' N, L34W. This might extend further to L32W near the base line. The structure which bears this low magnetic anomaly might then be shifted 200' south, cutting an elongated magnetic zone just south of the base line. This low magnetic zone is favourable for the occurrence of silicified rocks which may carry gold.

There are several indicated structures cross cutting the north-westerly magnetic trends outlined by the survey. They are particularly

obvious when cutting magnetic zones which are inferred as indicating granular basic volcanics and/or gabbro. One of these is inferred as indicating a north-south diabase dike; others could be cross faults and/or vein structures which should be further examined as northerly striking mineralized quartz veins have been found to the north and south of the anticlinal structure in the area.

The more interesting inferred structures are depicted on the plan accompanying this report. An approximate 1400' long magnetic zone on which the shaft is located appears to have been cut by cross faults just east of the shaft. The gold-bearing silicified zone in contact with this magnetic zone may have the same length if it follows, but shortened to about 1200' when following an inferred northwesterly fault, although it possibly extends beyond cross cutting faults.

ELECTROMAGNETIC SURVEY DATA -

The electromagnetic survey encountered no outstanding indication for the occurrence of a sizeable conductive body. However, there are four weak anomalies with negative resultant dip angles from 4 to 6 degrees which have not been covered by detailed work such as recommended by the instrument maker.

In addition, there are several marginal indications with dip angles in the order of 2 and 3 degrees but with profiles somewhat similar to what would be expected across a narrow conductor. One series is located at 400' to 500' north of the base line from L18W to L26W and

appears to strike toward the assumed location of the gold shaft and is associated with some decrements of magnetic readings and an inferred fault. Another interesting indication is located at 800' N, 1.50W, on the possible western extension of an inferred fault from the gold shaft. There are few other such marginal indications for possible conductors which may indicate weak sulphide mineralization along structures favourable for gold mineralization.

The overall picture calls for a VLF electromagnetic check survey as the Crone EM unit used for the survey is not effective in detecting shear or fault zones and/or boundaries between rock types of outstanding differences.

CONCLUSIONS AND RECOMMENDATIONS -

Data obtained by the line cutting and geophysical contractors have been critically examined by the writer. The results, interpretations and their correlation with other known data have been fully described in this report and depicted on two plans accompanying this report.

The following are the main features:

- (1) The claim group appears to be three-quarters to one claim south of the location where it was recorded with the Mining Recorder. Assuming from an interpretation of the field data and subsequently confirmed, the old

shaft, which was not found by the geophysical crew, is located at the northeastern end of a magnetic zone at the northeast part of Claim L. 324320.

- (2) Interpretation of the geophysical data gives an interesting picture which may help the development of the property. The old shaft is located on a magnetic zone just south of an inferred northwesterly fault. The magnetic zone is some 1400' long and cut by a cross fault just east of the shaft. It is not known if the gold-bearing silicified zone follows the north boundary of this magnetic zone or the inferred northwesterly fault.
- (3) The surveys encountered no indication for the occurrence of a sizeable conductive body for base metal possibilities. The surveys are, however, more in the reconnaissance nature. Several of the indicated features and some magnetic and electromagnetic indications as discussed in the body of this report, plus the reported gold-bearing silicified zone, require detailed check work to outline and delineate for better evaluation.
- (4) An interesting geological setting, somewhat similar to the reported gold occurrence, is located to the

immediate southeast of the claim group.

I recommend to carry out the following exploration work immediately after the spring "thaw":

- (1) To cover the shaft area 400' north-south by 1200' east-west with a detailed magnetic survey using 20' stations, designed to trace the reported gold-bearing silicified zone. It is preferable to have a high sensitivity Proton magnetometer for this detailed survey.
- (2) To carry out a VLF electromagnetic check survey along the central section of the line grid from L16W to L52W, 1000' north and south of the base line, across the claim group and to spot check other weak and/or marginal electromagnetic indications discussed in the body of this report and located outside of the central section.
- (3) If Claims Nos. L. 400734 and L. 400735, adjoining to the southeast, can be acquired for the group, extend the line grid to cover said two claims to check a large outcrop area of agglomerate and breccia by a combined magnetic and VLF electromagnetic survey.
- (4) To conduct a program of geological prospecting to check an interesting low magnetic anomaly located 400' to the southwest of the old shaft and to check other indicated

fault structures within possible outcrop areas for gold possibilities; to map in detail the outcrop areas around the gold shaft and to check other interesting indications which may be obtained by the recommended VLF EM survey. This recommendation may be conducted by the resident geologist during exploratory diamond drilling of the reported gold occurrence.

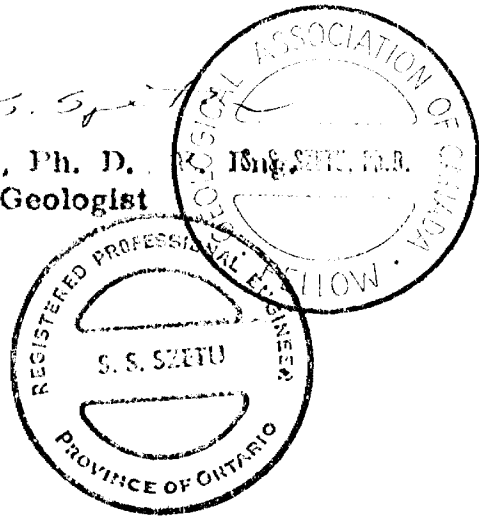
Respectfully submitted.

CANA EXPLORATION CONSULTANTS LIMITED

S. S. Szetu
S. S. Szetu, Ph. D.
Consulting Geologist

SSS:r
Encl.

Toronto, Ontario
May 24th, 1974.



CANA EXPLORATION CONSULTANTS LIMITED

GEOPHYSICAL - GEOLOGICAL
TECHNICAL DATA STATEMENT



900

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: GEOPHYSICAL (MAGNETOMETER & ELECTROMAGNETIC)
Township or Area: MAISONVILLE & BERNHARDT TWPS.
Claim holder(s): E. J. REVERS (Miner's Lic. C 29814
32 HILL CRESCENT, SCARBOROUGH, ONTARIO.
Author of Report: E. S. SZETO, Ph.D., P.Eng.,
Geophysical Exploration Consultants Ltd. Room 220,
Address: 12 Richmond St. East, Toronto, Ontario.
Covering Dates of Survey: March 18/74 to May 24/74 incl.
Total Miles of Line cut: 22.33 (line cutting to office) MILES

MINING CLAIMS TRAVERSED	
List numerically	
L 324314	(prefix) (number)
L 324315	
L 324316	
L 324317	
L 324318	
L 324319	
L 324320	
L 324321	
L 324322	
L 324323	
L 324324	
L 324325	
TOTAL CLAIMS <u>12</u>	

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

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)
DATE: MAY 31, 1974 SIGNATURE: [Signature]
Author of Report

OFFICE USE ONLY

PROJECTS SECTION
Res. Geol. _____ Qualifications 63-1064
Previous Surveys L.D. 2.11.74 survey
Checked by _____ date _____
GEOLOGICAL BRANCH _____
Approved by _____ date _____
GEOLOGICAL BRANCH _____
Approved by _____ date _____

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 987 (appr.) Number of Readings 987 MAGNETOMETER 987 ELECTROMAGNETIC
Station interval 100 FEET
Line spacing 200 FEET
Profile scale or Contour intervals Profile Scale 1/10" = 1° (E.M.); 500 GAMMAS (Magnetometer) (specify for each type of survey) Contour interval

MAGNETIC

Instrument SCIENTIFIC LTD. FLUXGATE MAGNETOMETER MODEL MP-1 SERIAL # 30752
Accuracy - Scale constant 20 GAMMAS PER SCALE DIVISION
Diurnal correction method BASEL CONTROL
Base station location ALONG BASE LINE (SEE 1"=200' SCALE PLAN) 'MAGNETOMETER SURVEY' CONSOLIDATED DEARBORN RESOURCES LTD. (PATWINDER OPTION) ... ACCOMPANYING ELECTROMAGNETIC REPORT DATED MAY 24, 1974.

Instrument CRONE GEOPHYSICS LTD. J.E.L. UNIT SERIAL (OR Model) 71 77.)
Coil configuration vertical transmitter coil
Coil separation 200'
Accuracy
Method: [] Fixed transmitter [X] Shoot back [] In line [] Parallel line
Frequency 1800 cps (specify V.L.F. station)

Parameters measured dip angle

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

MELBA TWP. M.371

THE TOWNSHIP OF
OF
BERNHARDT

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

PATENTED LAND	⊙
CROWN LAND SALE	⊙
LEASES	⊙
LOCATED LAND	⊙
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	⊙
CANCELLED	⊙

NOTES

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

MINING LANDS
DATE OF ISSUE
JUN - 4 1974
MINISTRY OF NATURAL RESOURCES

PLAN NO. **M.327**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

FILE 2.1485

MASONVILLE TWP. M.361

MORRISSETTE TWP. M.374

TECK TWP. M.392



BENOIT TWP. M.326

THE TOWNSHIP OF
OF
MAISONVILLE

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

PATENTED LAND	● or (P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	—
CANCELLED	—
PATENTED S.R.O.	—

NOTES

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

Withdrawn from Staking under
Section 42 of Mining Act

File	Date	Disposition
22032	11-Aug-70	S. R. O.

MINING LANDS
DATE OF ISSUE
JUN - 4 1974
MINISTRY
OF NATURAL RESOURCES

PLAN NO. **M.361**

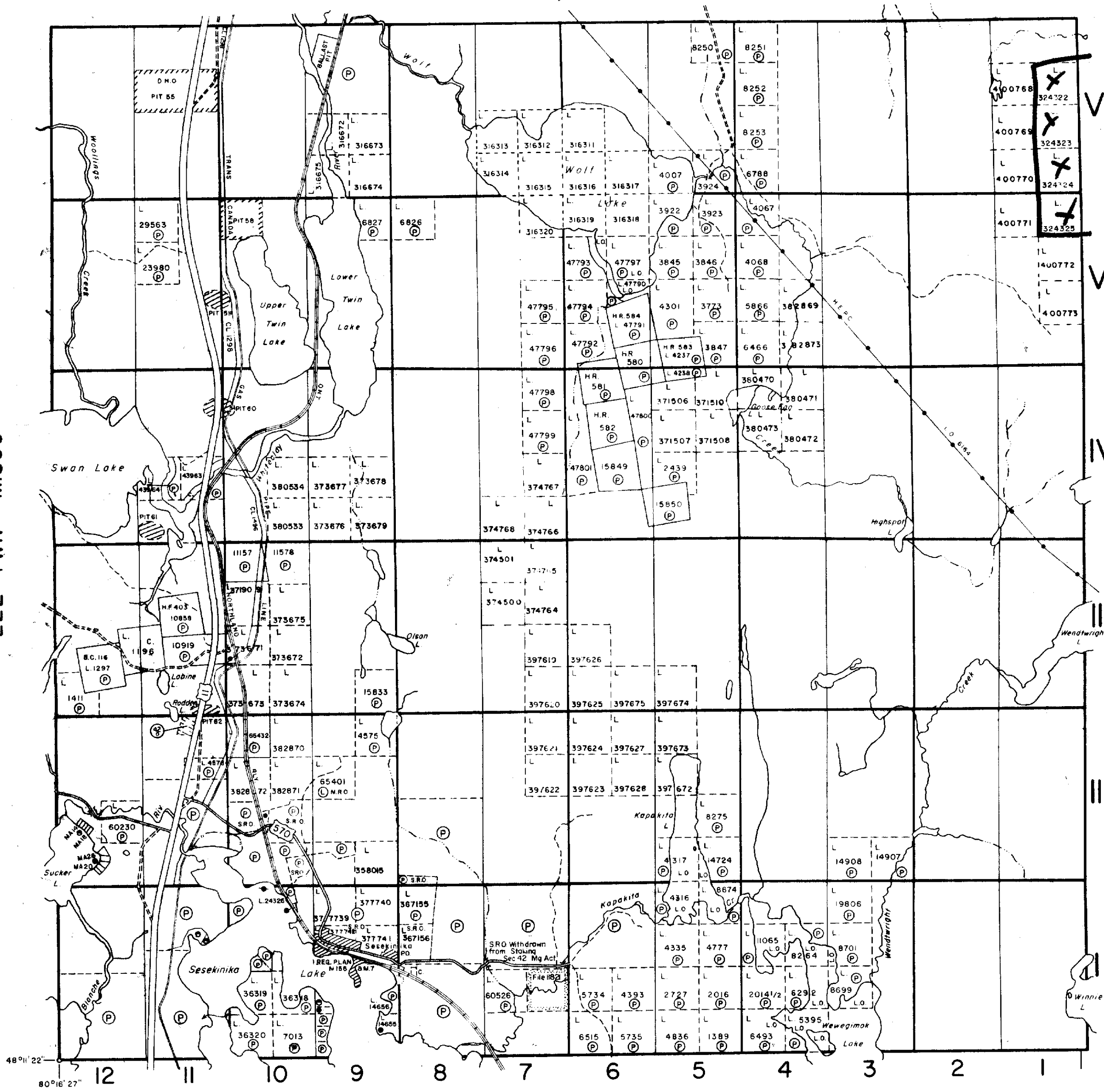
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

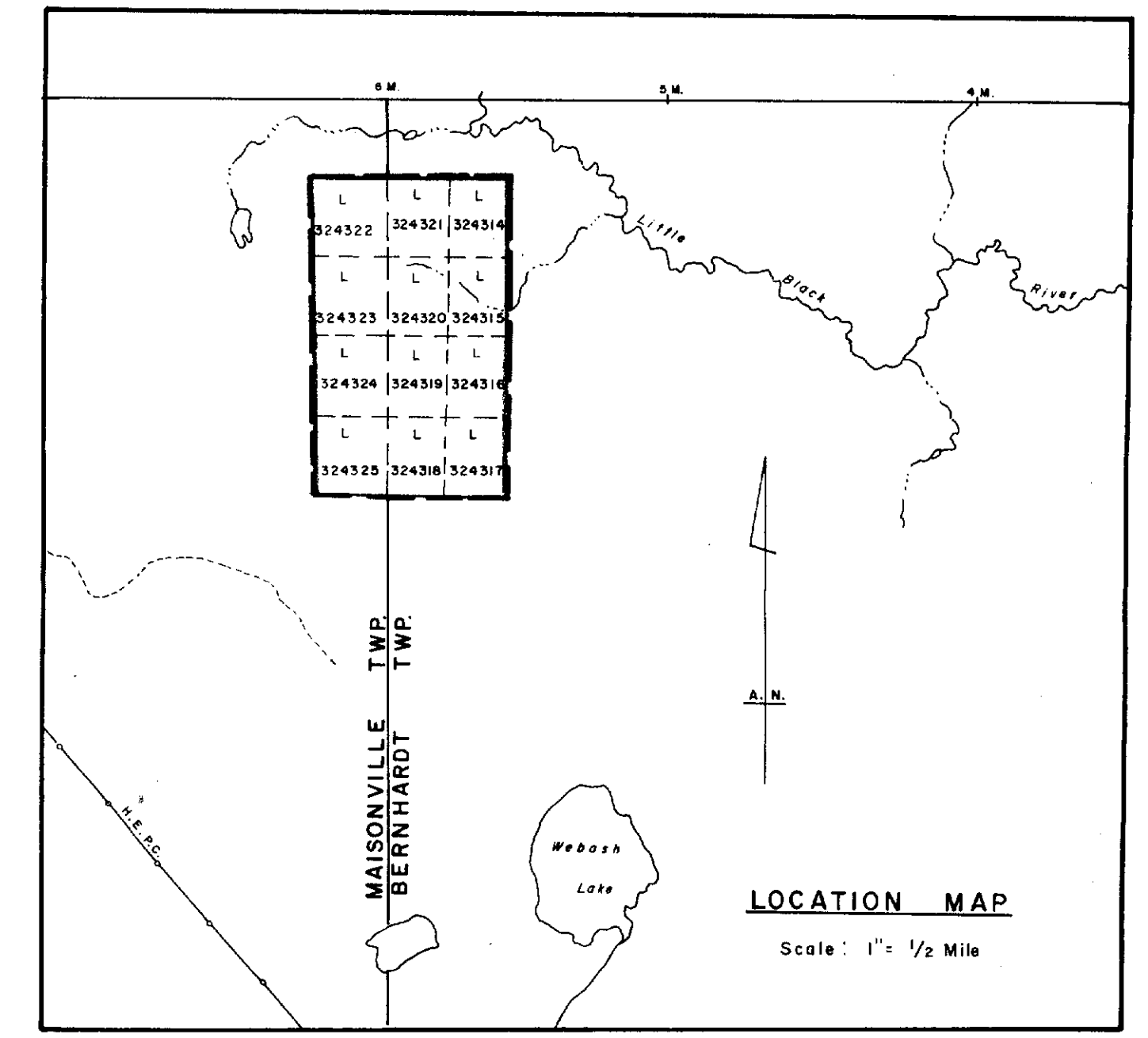
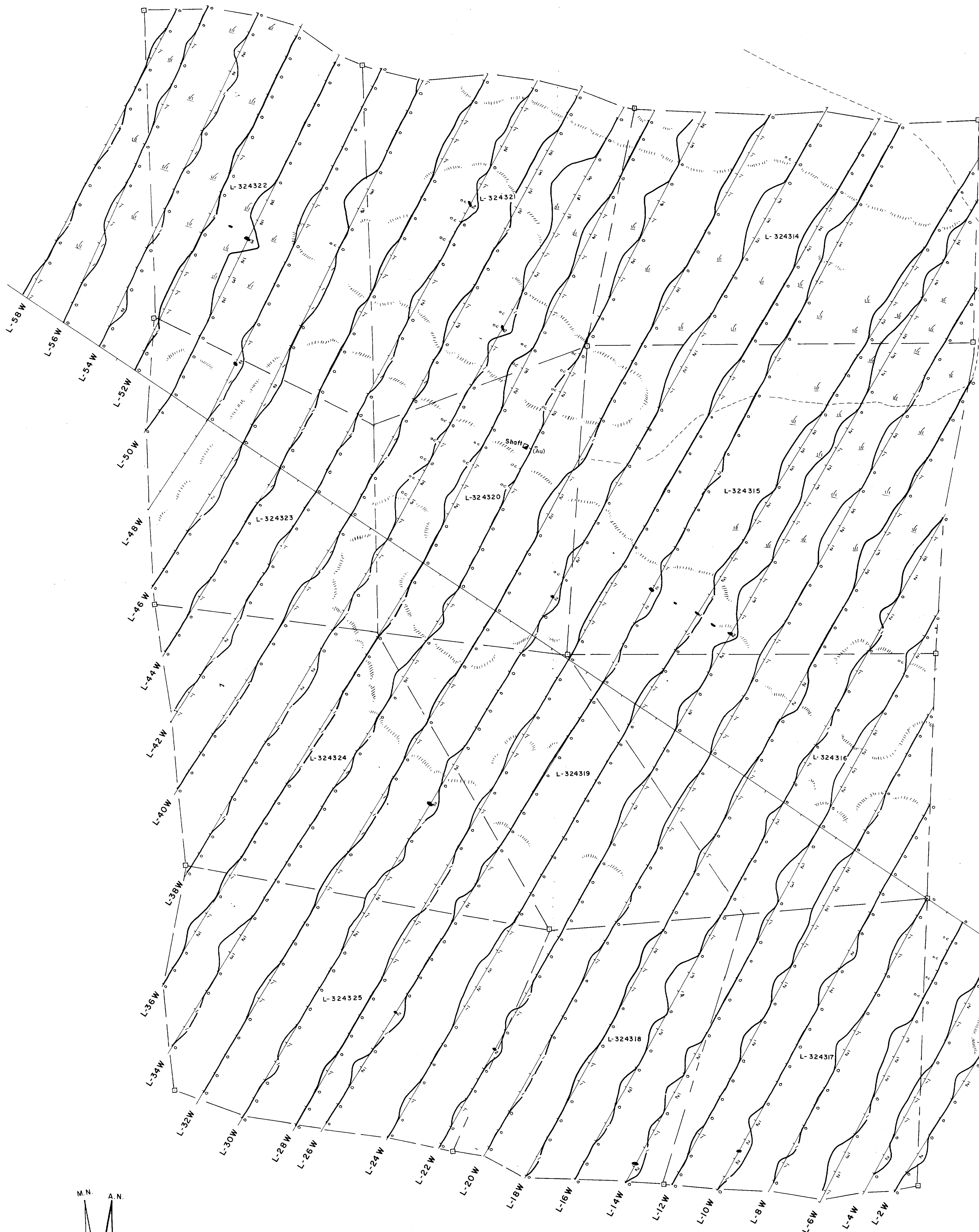
FILE 21485

LEE TWP. - M.360

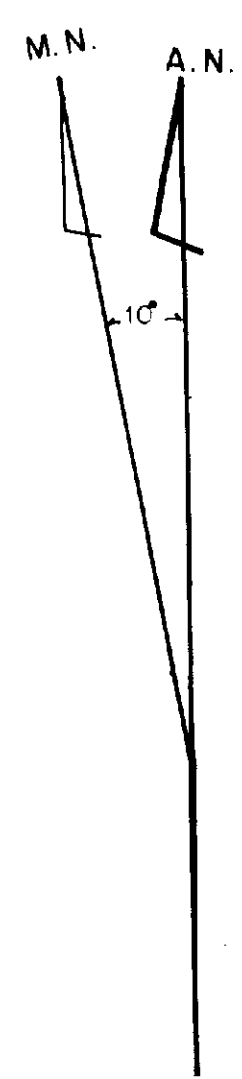
BERNHARDT TWP. - M.327

GRENFELL TWP. - M.351





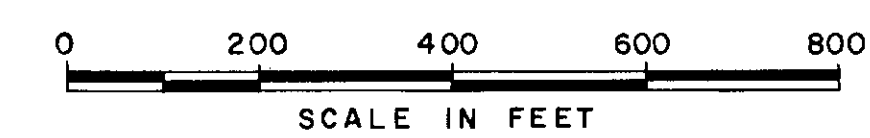
- LEGEND**
- Claim post observed by Line Cutters and/or Geophysical Operators; Claim boundaries observed and assumed.
 - Swamp and/or low ground with tag alders.
 - Approximate location of water trail.
 - High ground.
 - Outcrop areas noted along picket line.
 - Electromagnetic dip angle obtained by using a Crone Jam Unit with readings plotted mid-point between two operators standing 200 ft. apart.
 - Scale of profile : 1/10" = 1'
 - Axis of weak marginal electromagnetic indication for possible conductor.



**ELECTROMAGNETIC SURVEY
CONSOLIDATED BEAUMONT RESOURCES LTD.
(PATHFINDER OPTION)**

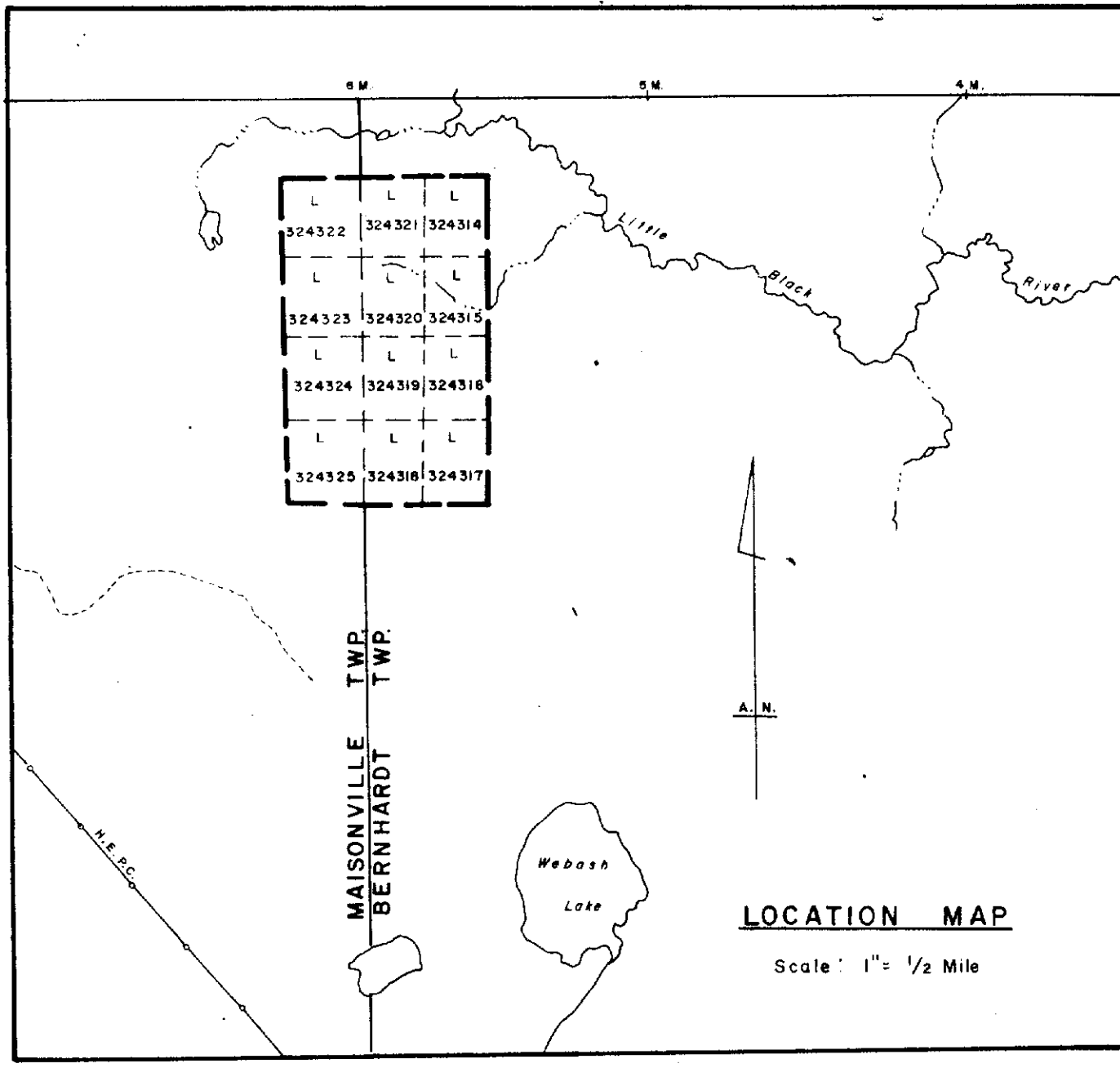
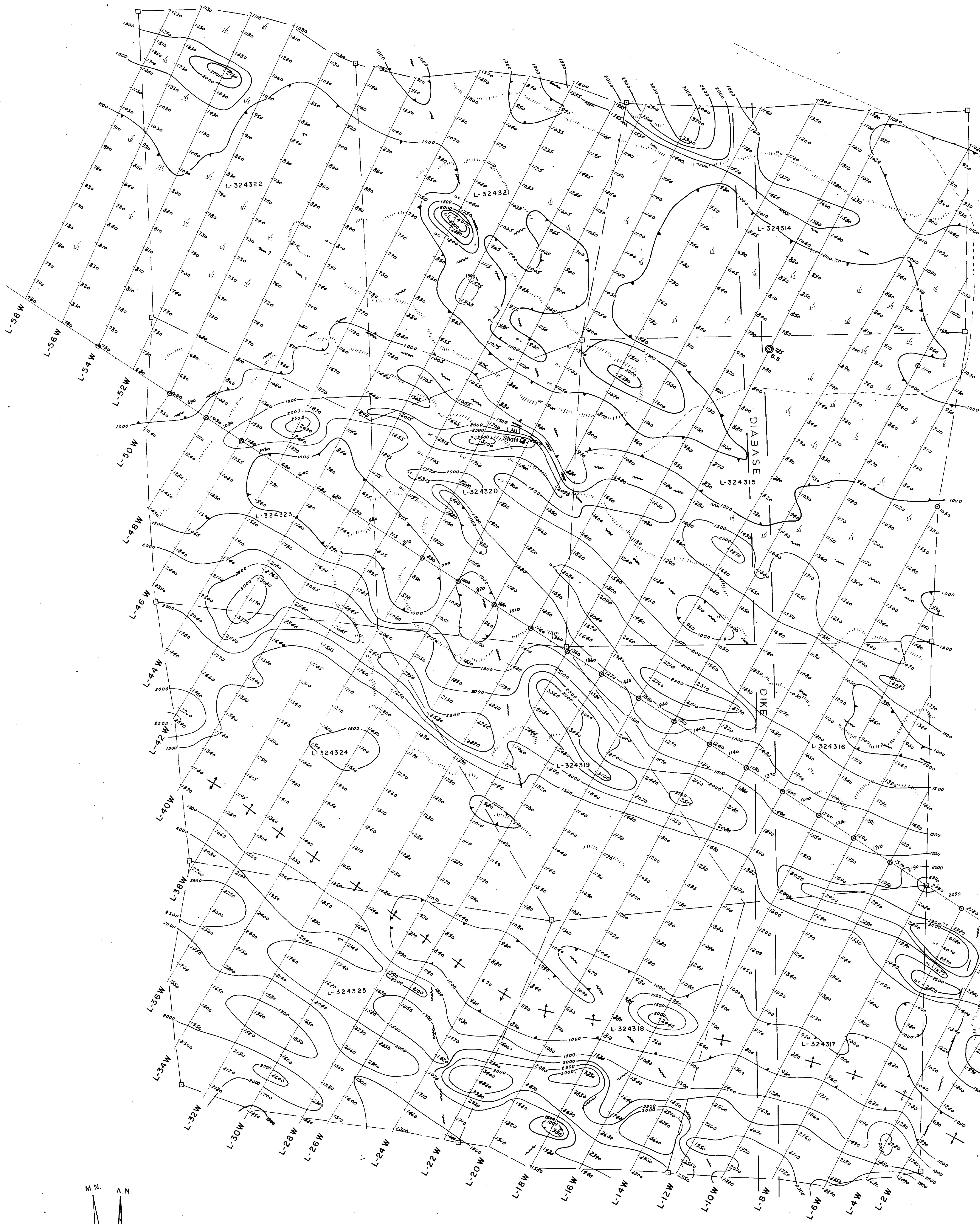
CLAIMS NOS. L 324314 - L 324321 ; L 324322 - L 324325
MAISONVILLE & BERNHARDT TOWNSHIPS
LARDER LAKE MINING DIVISION, ONTARIO, CANADA

2.1485

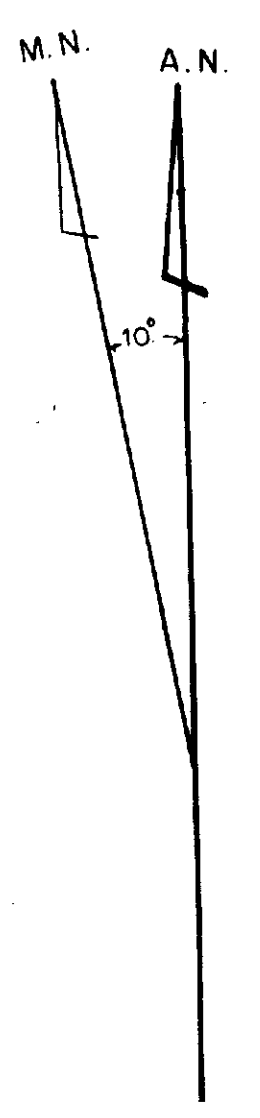


Report by: S. S. Szetu, Ph D., P. Eng.
Field work by: W. J. Sharpe, Geophysical Contractor.
Approved: A. S. Bayne, P. Eng., Project Manager.
Toronto, Ontario, Canada. May, 1974.



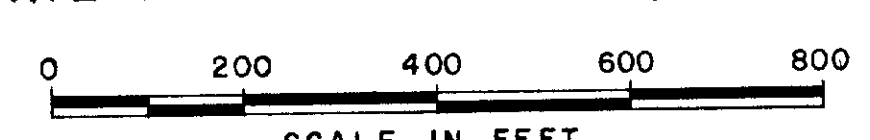


- LEGEND**
- Claim post observed by Line Cutters and/or Geophysical Operators;
 - Claim boundaries observed and assumed.
 - Swamp and/or low ground with tag alders.
 - Approximate location of winter trail.
 - High ground
 - Outcrop areas noted along picket line.
 - Magnetometer readings in gammas
 - Magnetic control stations used for survey
 - Base control station
 - > 3000 gammas
 - 2500 - 3000 gammas
 - 2000 - 2500 "
 - 1500 - 2000 "
 - 1000 - 1500 "
 - < 1000 "
 - Inferred fault or shear
 - Inferred anticline



**MAGNETOMETER SURVEY
CONSOLIDATED BEAUMONT RESOURCES LTD.
(PATHFINDER OPTION)**

CLAIMS NOS. L 324314 - L 324321; L 324322 - L 324325
MAISONVILLE & BERNHARDT TOWNSHIPS
LARDER LAKE MINING DIVISION, ONTARIO, CANADA



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