



41P04SE0007 2.1034 DUBLIN

010

Report Covering
Electromagnetic & Magnetic Surveys over
JEROME EXPLORATIONS LIMITED CLAIM GROUP,
Dublin & Battersby Townships,
Sudbury Mining Division, Ontario.

Claims: S-289926 - S-289954
S-264021 and S-264022
S-323362

Total: 32 contiguous claims

Surveys: Electromagnetic: VLF-EM, Crone RADEM
Magnetic: Sharpe Fluxgate

Maps: 2

Report by: J. Duncan Crone, B.A., P.Eng.

Date: September 11th, 1972.

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CLAIMS & LOCATION

The group of 32 contiguous claims are cut by Highway #144, 26 miles north of Benny at Muldrew Lake. The claim numbers are as follows: S-289926 - S-289954; S-264021, S-264022 and S-323363.

LINECUTTING

A 400' line interval grid was cut under the direction of A.S. Bayne of A.S. Bayne & Company of Toronto, crew chief A. Jerome of P.O. Box 491, Hanmer, Ontario. Total number of miles cut was 28, period of cutting May 1 to May 27, 1972.

GEOPHYSICAL SURVEYS, OPERATORS AND DATES

The VLF-EM survey was carried out by W.J. Sharpe and A. Jerome of Toronto and P.O. Box 491, Hanmer, Ontario respectively

during the period August 25 to September 11, 1972. Total number of VLF-EM stations - 1366.

The magnetic survey was conducted by the same operators during the period August 25 - September 11, 1972. Total number of magnetic stations - 1264.

GEOPHYSICAL EQUIPMENT AND METHODS USED

A Sharpe Fluxgate magnetometer was used measuring the vertical component of the earth's magnetic field directly in gammas. Normal drift corrections were carried out. Accuracy is ± 20 gammas.

Base stations @ turning point along baseline. ~ every 400', 1 hr interval,

For the VLF-EM survey a Crone RADEM instrument was used measuring the dip angle of the VLF field in degrees (accuracy $\pm 1^\circ$) and the Horizontal component of the Field Strength (in anomalous areas), accuracy $\pm 5\%$. Station used was Cutler, Maine, 17.8K Hz.

INTERPRETATION

Numerous isolated magnetic highs occur which are thought to be caused by north-south diabase dikes. The magnetic anomalies do not appear to have any relationship to the VLF-EM conductors or the known mineralized showings.

The Electromagnetic survey produced essentially two parallel conductors, usually 200' to 500' apart, that occur intermittently across the claim group.

The sulphide showings on lines 16E, 20E and 24E all occur

on the projection of the southern conductor. These three sulphide showings do not produce VLF anomalies. The sulphide showings near lines 56W and 64W occur on the two conductive zones as do two of the showings immediately west of Highway #144.

The postulated fault down Muldrew Lake produces a strong VLF-EM response on Lines 0 and 4E. The strong VLF-EM dip angles on the northern portion of L20W are probably also due to a postulated north-south trending fault.

The two parallel VLF-EM conductors are probably sulphide zones. They may be formational zones rather than mineralized shears. They are strongest at the following locations.

Line 36E, 2 + 00N: Line 28E, 5 + 00S: Line 0, 15 + 00S:

Line 4W, 15 + 50S, under lake: Line 8W, 15 + 50S, (under lake):

Line 24W, 16 + 50S: Line 32W, 16 + 50S: Line 64W, 11 + 50S:

Line 68W, 14 + 50S.

The isolated anomaly at L68W, 3 + 00S could be of interest.

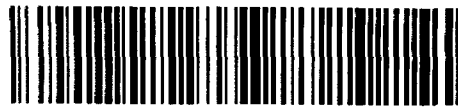
I would propose ground examination of these locations, stripping and trenching if feasible; soil sampling if this is not possible and if the ground is suitable. If encouraging results are obtained then a drill program would be necessary.



Respectfully submitted,

J. Duncan Crone
J. Duncan Crone, B.A., P.Eng.
Geophysicist.

GEOPHYSICAL - GEOLOGICAL
TECHNICAL DATA



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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.

RECEIVED

OCT 6 - 1972

PROJECTS
SECTION

Type of Survey ELECTROMAGNETIC
Township or Area DUBLIN & BATTERSBY TOWNSHIPS
Claim holder(s) JEROME EXPLORATIONS LIMITED
Author of Report DUNCAN CRONE
Address 3607 Wolfedale Rd., Mississauga, Ontario
Covering Dates of Survey August 25/72 to Sept. 11/72
(linecutting to office)
Total Miles of Line cut 28

MINING CLAIMS TRAVERSED
List numerically

See list behind
List enclosed
(prefix) (number)
pink sheets

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

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

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Sept. 14/72 SIGNATURE: [Signature]
Author of Report or Agent

PROJECTS SECTION

Res. Geol. _____ Qualifications _____

Previous Surveys _____

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 32

OFFICE USE ONLY

If space insufficient, attach list

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

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations _____ Number of Readings 1366
Station interval 100'
Line spacing 400'
Profile scale or Contour intervals _____
(specify for each type of survey)

MAGNETIC

Instrument _____
Accuracy - Scale constant _____
Diurnal correction method _____
Base station location _____

ELECTROMAGNETIC

Instrument RADEM, VLF-EM
Coil configuration VLF-EM TX
Coil separation _____
Accuracy + 1° dip angle, + 5% Horizontal Field Strength
Method: Fixed transmitter Shoot back In line Parallel line
Frequency Cutler, Maine 17.8K Hz
(specify V.L.F. station)
Parameters measured Dip angle and Horizontal Field Strength

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 _____

**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
0016-1912
PROJECTS
SECTION

Type of Survey MAGNETIC
Township or Area DUBLIN & BATTERSBY TOWNSHIPS
Claim holder(s) JEROME EXPLORATIONS LIMITED
Author of Report DUNCAN CRONE
Address 3607 Wolfedale Road, Mississauga, Ontario
Covering Dates of Survey August 25 to September 11/72
(linecutting to office)
Total Miles of Line cut 28

**MINING CLAIMS TRAVERSED
List numerically**

see list following
~~List Enclosed~~
(prefix) (number)

**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 40
 - Magnetometer 20
 - Radiometric 20
 - Other _____
- Geological _____
- Geochemical _____

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

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Sept. 14/72 SIGNATURE: *[Signature]*
Author of Report or Agent

PROJECTS SECTION

Res. Geol. _____ Qualifications 63.1322

Previous Surveys 63.2954 *not for assessment*
credits

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 32

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

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations _____ Number of Readings 1264
Station interval 100'
Line spacing 400'
Profile scale or Contour intervals _____
(specify for each type of survey)

MAGNETIC

Instrument Sharpe Fluxgate ^{MFI} MFI
Accuracy - Scale constant + 20 gammas
Diurnal correction method Base Station
Base station location L 0 + 00, 0 + 00

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 _____

MINING CLAIMS TRAVERSED

S-289926	S-289943
S-289227	S-289944
S-289928	S-289945
S-289929	S-289946
S-289930	S-289947
S-289931	S-289948
S-289932	S-289949
S-289933	S-289950
S-289934	S-289951
S-289935	S-289952
S-289936	S-289953
S-289937	S-289954
S-289938	S-264021
S-289939	S-264022
S-289940	S-323362
S-289941	
S-289942	

Situated in Dublin and Battersby Townships, Sudbury Mining
Division.

TOTAL CLAIMS: 32

M-767

M-767

DUBLIN TWP.

DUBLIN TWP.

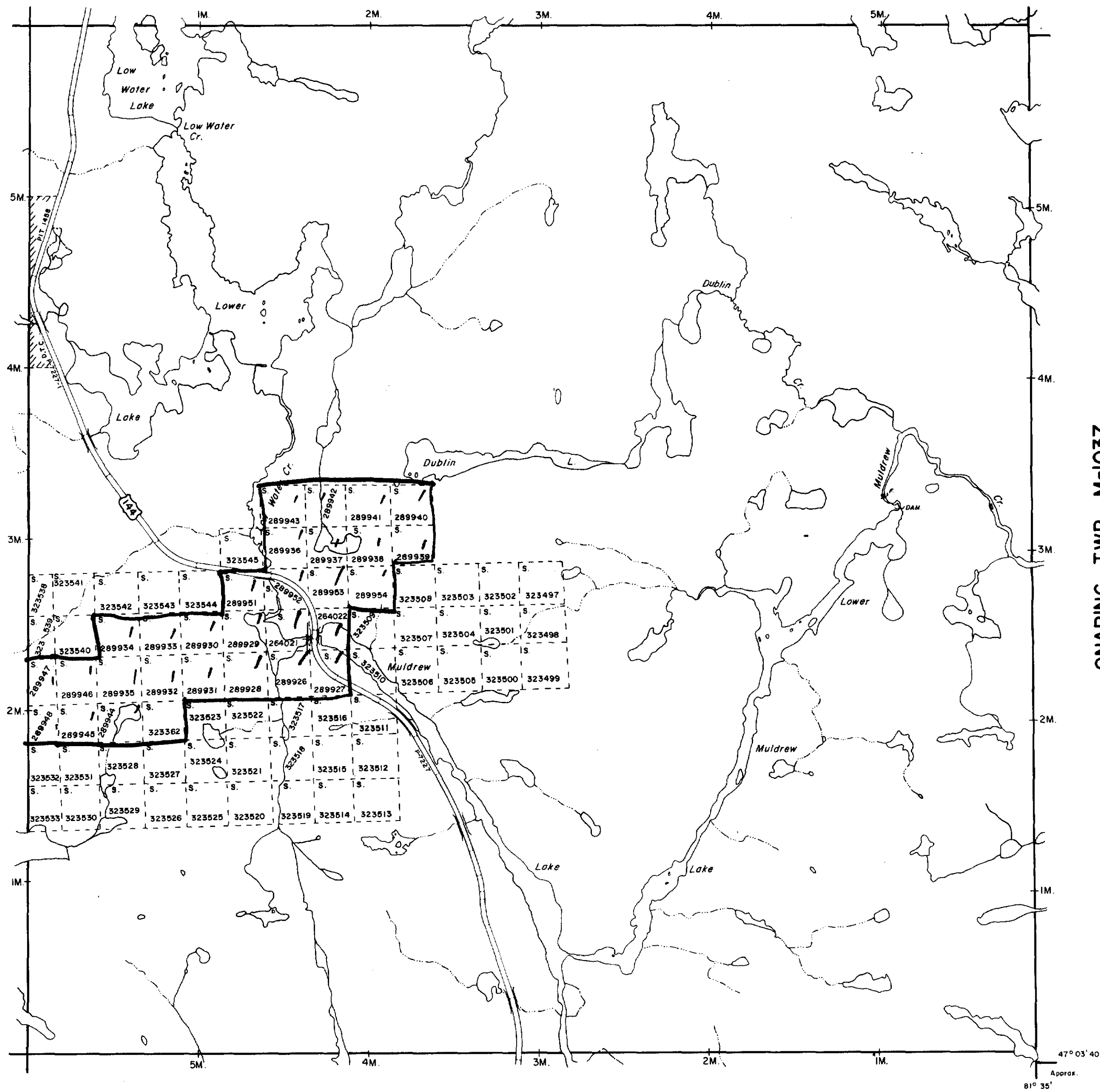
767

M-767

BAYNES TWP. M-652

BATTERSBY TWP. M-651

ONAPING TWP. M-1037



MULDREW TWP. M-876

NOTES

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

DATE OF ISSUE

OCT 1 1972

ONT. DEPT. OF MINES AND NORTHERN AFFAIRS

LEGEND

- PATENTED LAND Ⓢ or ●
- PATENTED FOR SURFACE RIGHTS ONLY Ⓢ
- LEASE Ⓢ
- LICENSE OF OCCUPATION L.O.
- CROWN LAND SALES C.S.
- LOCATED LAND Loc.
- CANCELLED C.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- HIGHWAY & ROUTE NO. 17
- ROADS |||
- TRAILS ---
- RAILWAYS =
- POWER LINES ---
- MARSH OR MUSKEG ~
- MINES X

*used only with summer resort locations or when space is limited

TOWNSHIP OF

DUBLIN

DISTRICT OF SUDBURY

claim map

2.1034

SUDBURY MINING DIVISION

SCALE : 1 INCH = 40 CHAINS (1/2 MILE)

DR. R.W. NOBLE

DATE MAR. 17, 72

PLAN NO. M-767

ONTARIO DEPARTMENT OF MINES AND NORTHERN AFFAIRS



Claim map

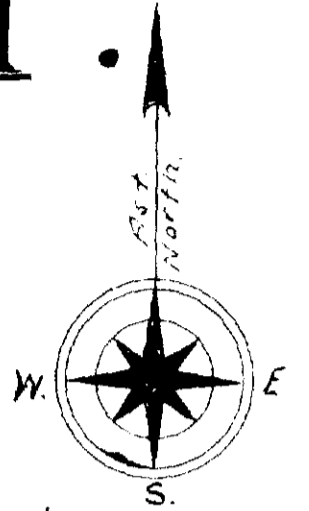
PLAN OF BATTERSBY TWP. SUBBURY MINING DIVISION. DISTRICT OF SUBBURY.

NOTE

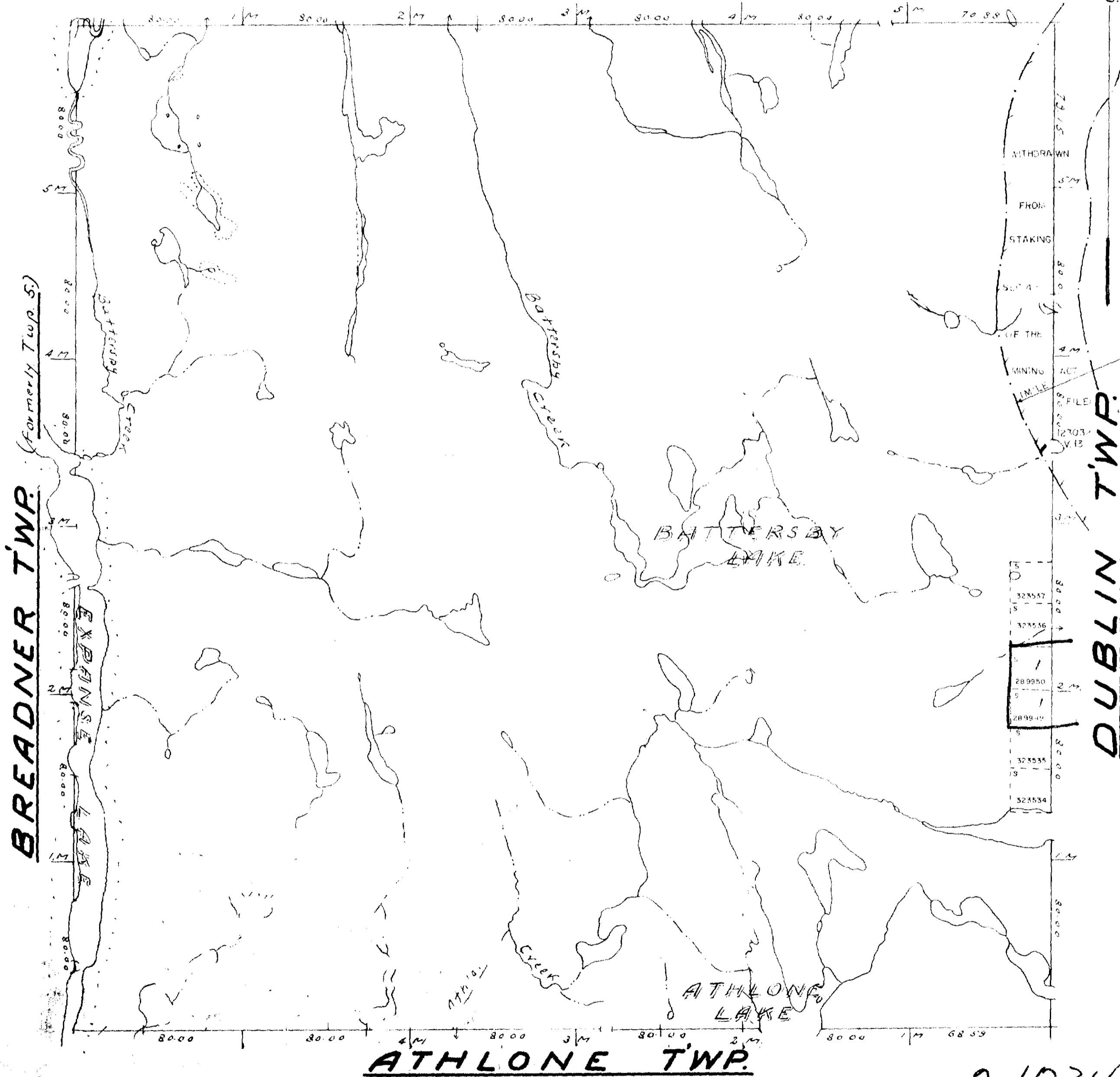
400' Surface Rights Reservation
around all Lakes and Rivers.

— Scale 40 chains to an inch. —

M.651



MARQUETTE TWP.



BREADNER TWP.
(formerly Twp. 5.)

DUBLIN TWP.

ATHLONE TWP.

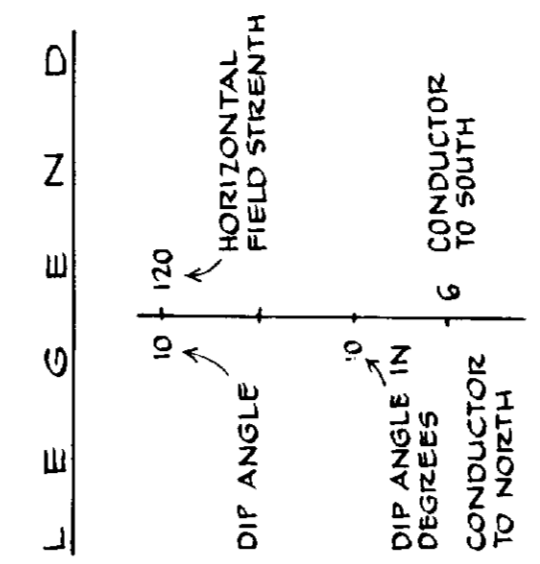
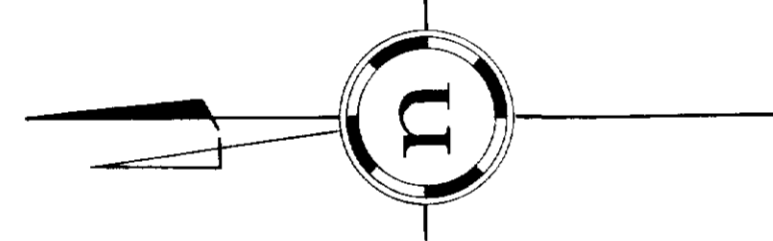
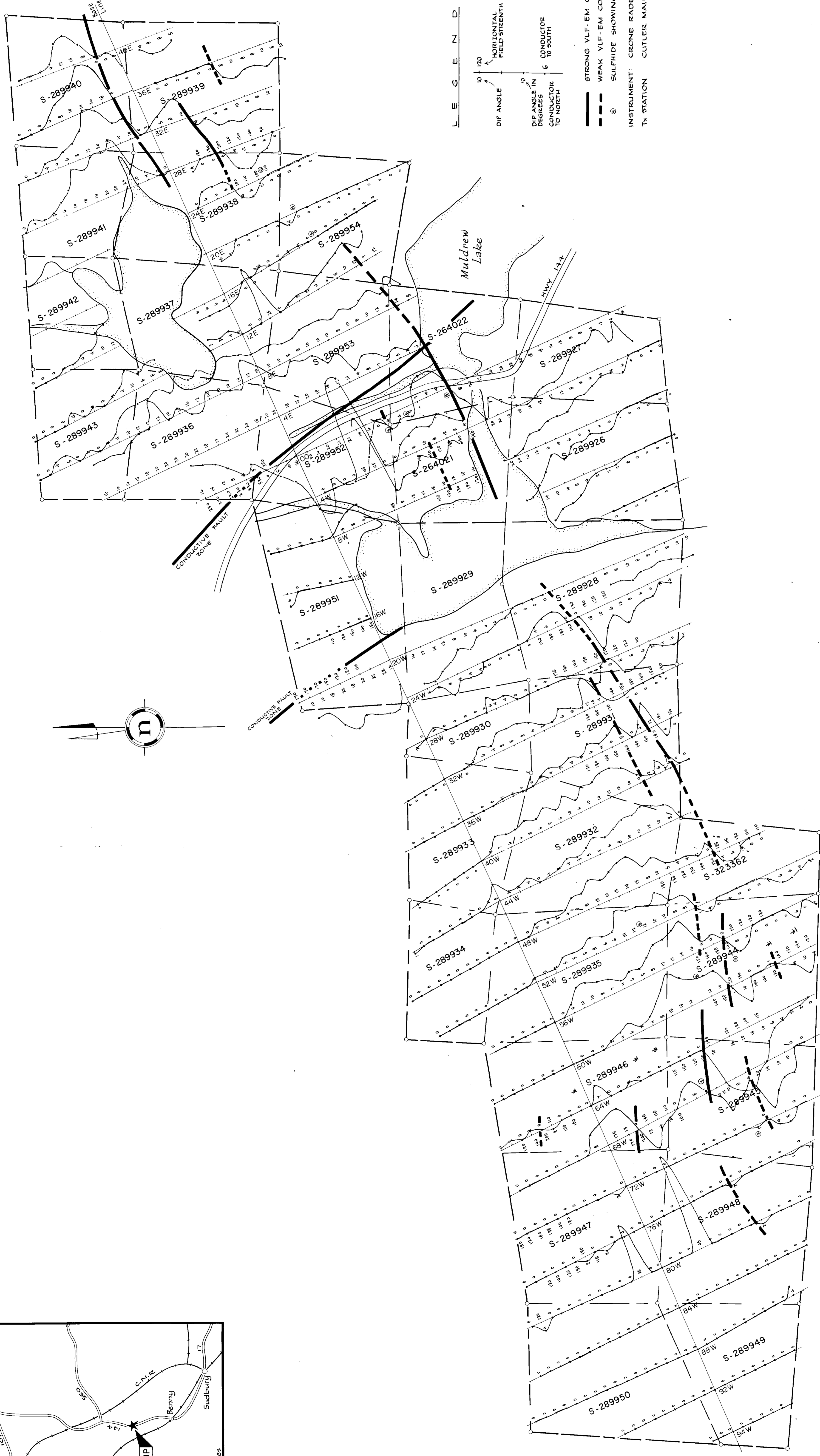
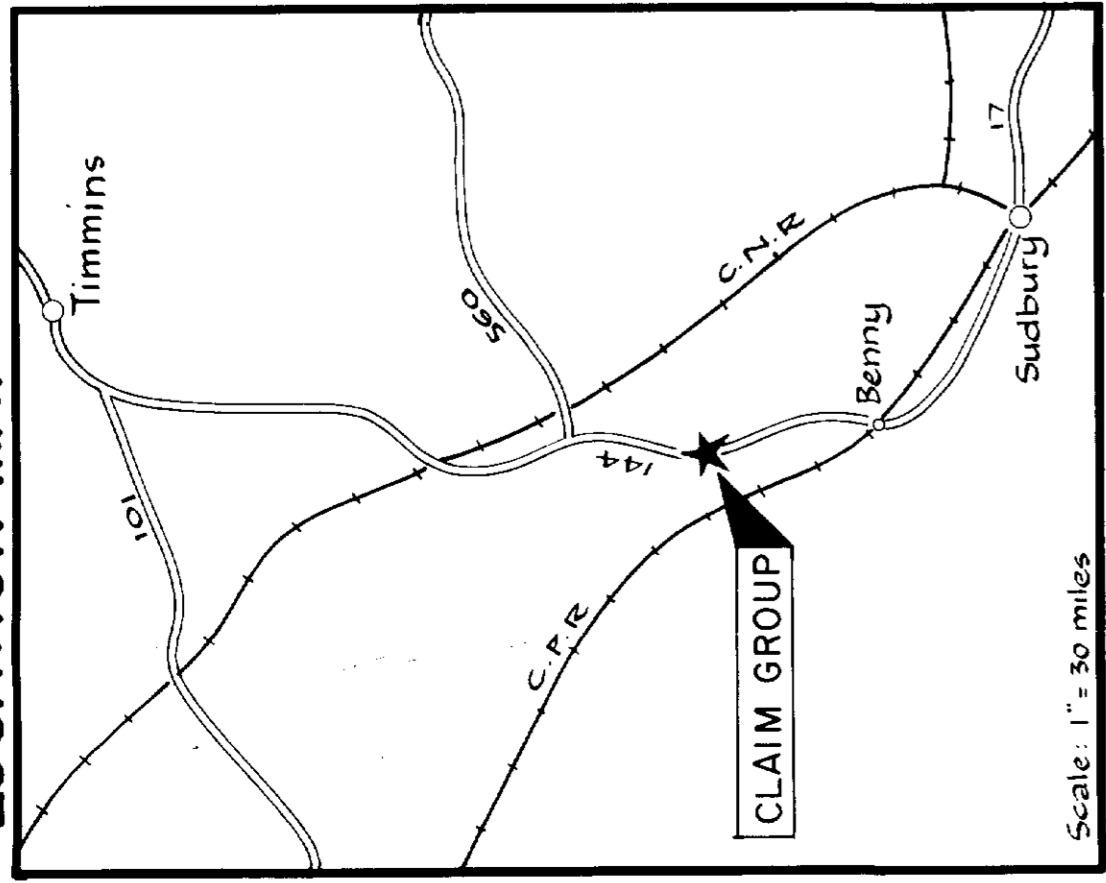
Notes

- | | |
|-----------------------------|-----------------------------|
| Railways shown thus | Non-perennial streams |
| Paved Highways | Bridges |
| Gravel | Swampy |
| Highway Route No. | Swamps |
| Other Roads | Areas marked R are Patented |
| Trails & Paths | L are Leased |
| Telephone & Telegraph Lines | L.O. held under |
| Electric Power Lines | License of Occupation |

2.1034

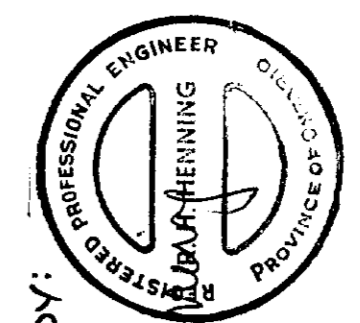


LOCATION MAP



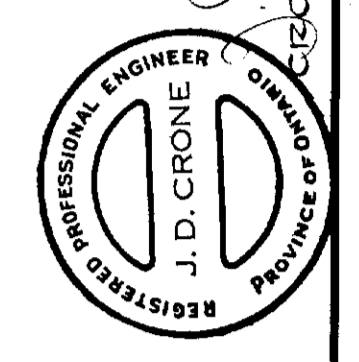
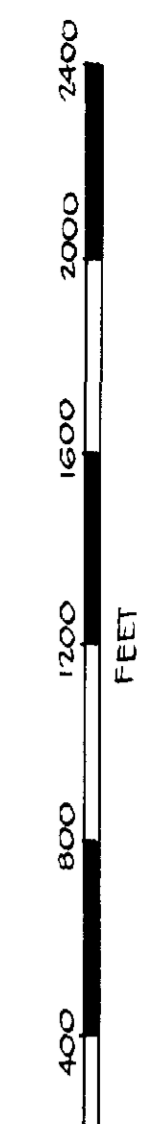
STRONG VLF-EM CONDUCTOR
 WEAK VLF-EM CONDUCTOR
 SULPHIDE SHOWINGS
 INSTRUMENT: CRONE RADEM
 TX STATION: CUTLER MAINE 178 KHZ

Revised by: *[Signature]*
 Nov. 3/74



JEROME EXPLORATIONS LIMITED
 DUBLIN TOWNSHIP PROPERTY, SUDBURY MINING DIVISION
 ONTARIO

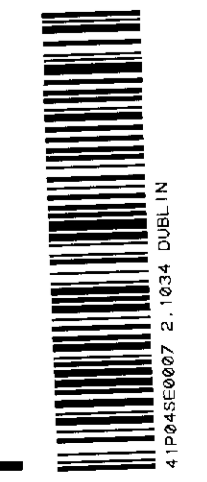
ELECTROMAGNETIC SURVEY



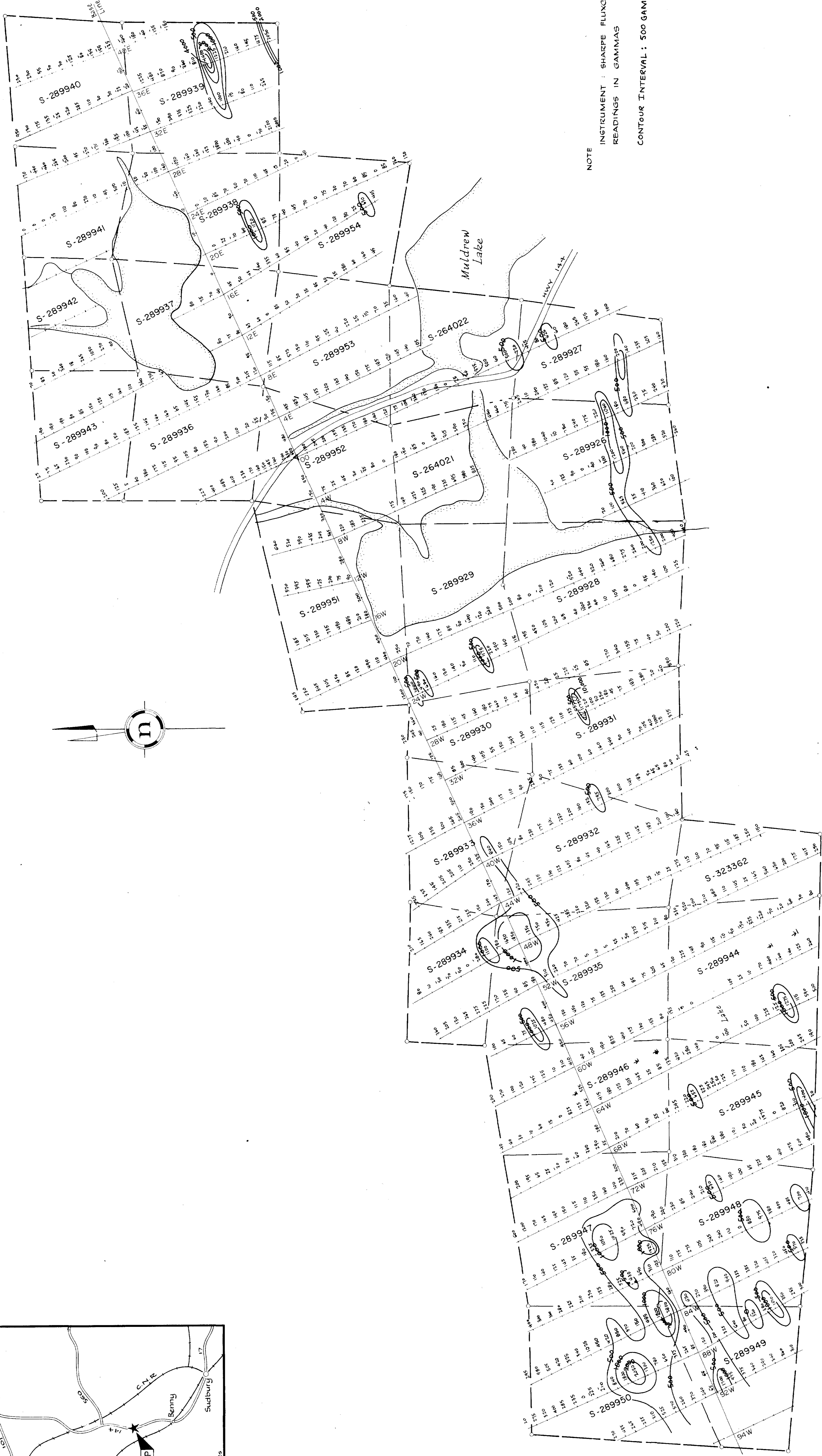
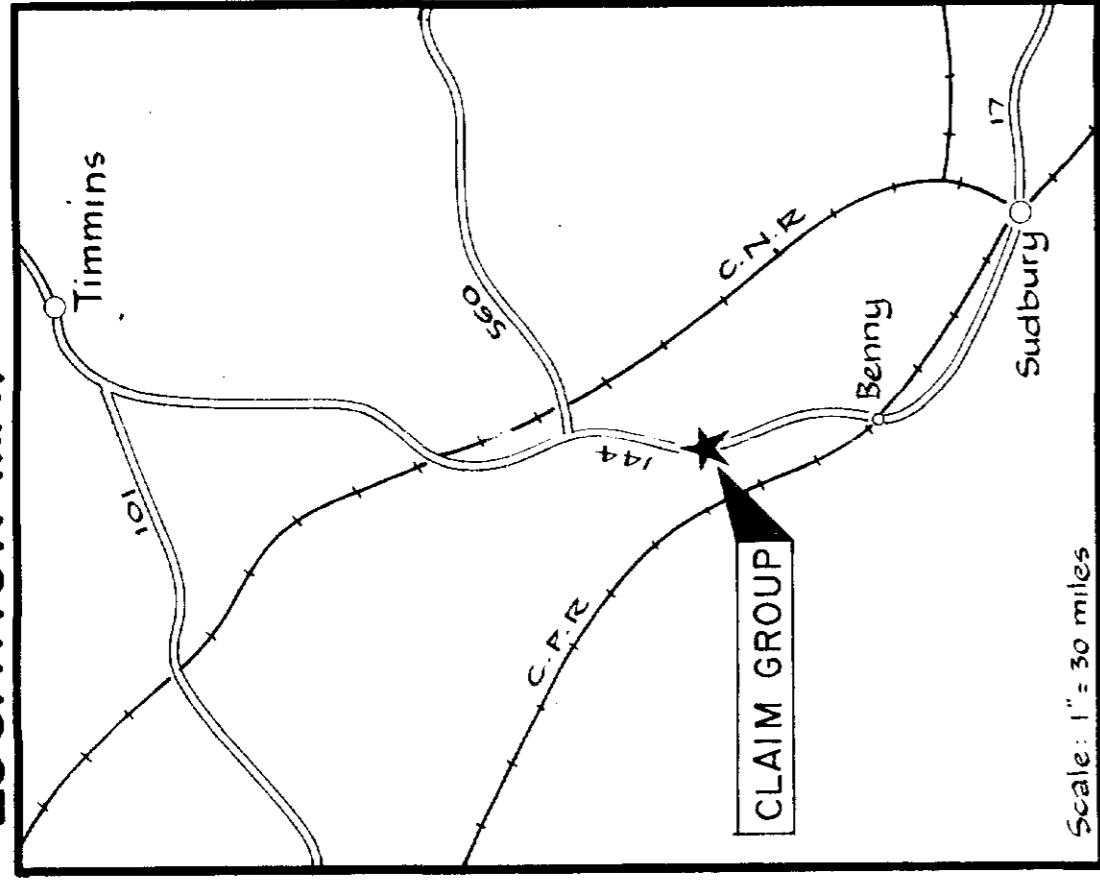
CRONE GEOPHYSICS LTD

AUGUST '72

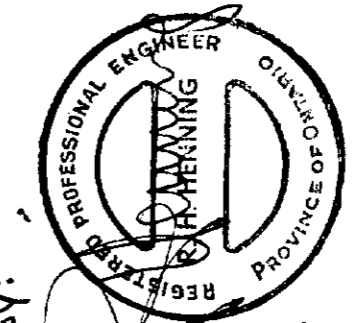
2-1034



LOCATION MAP

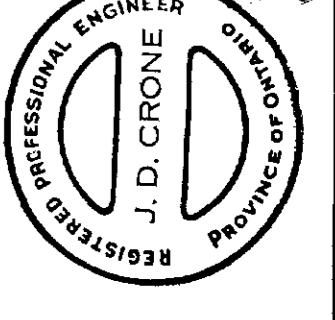
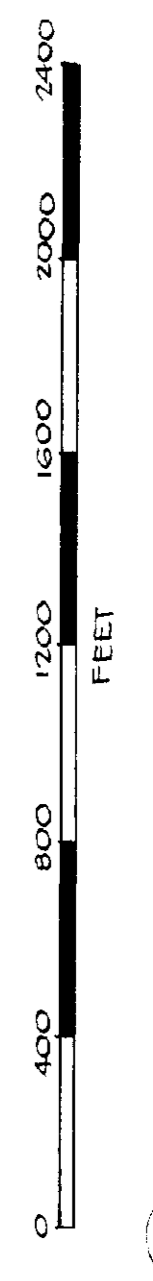


Revised by: *[Signature]*
 Jan 3/78.



JEROME EXPLORATIONS LIMITED
 DUBLIN TOWNSHIP PROPERTY, SUDBURY MINING DIVISION
 ONTARIO

MAGNETIC SURVEY



[Signature]
 CRONE GEOPHYSICS LTD

