



42C08SW0084 0060A1 JACOBSON

010

MAGNETOMETER SURVEY
CLINE DEVELOPMENT CORPORATION
CHUBB OPTION CLAIMS
JACOBSON TOWNSHIP
ONTARIO

RECEIVED
JUN 07 1984
MINING LANDS SECTION

L.D.S. Winter
B.A.Sc., M.Sc., F.G.A.C.
May 30, 1984

1. INTRODUCTION

Cline Development Corporation holds 12 claims (the Chubb Option) in Jacobson township in the Goudreau-Lochalsh area of the District of Algoma, Ontario. The writer was requested to carry out a magnetometer survey of the claim group and this work was done during the period March 29, 1984 to April 4, 1984.

The following report outlines the work done, presents the results and a preliminary interpretation of the survey.

2. PROPERTY

2.1 LOCATION

The Chubb claim group of Cline Development Corporation is located in central Jacobson township at approximately $48^{\circ}-19'$ N latitude, $84^{\circ}-20'$ W longitude, approximately 8 km west of Lochalsh and 21 km southeast of Dubreuilville.

2.2 PROPERTY ACCESS

The property consists of 12 unpatented, contiguous mining claims as shown on the accompanying map after Plan M.1583 of the Surveys and Mapping Branch of the Ontario Ministry of Natural Resources. The claim numbers are as follows:

SSM 647055 to 647066 inclusive

The claim group can be easily accessed from Dubreuilville via a forest access road southeast 19.5 km to the Goudreau-Lochalsh road. The property is 1.2 km east of this junction and immediately south of the Goudreau-Lochalsh road.

2.3 TOPOGRAPHY AND VEGETATION

The property has an irregular topography consisting of till covered ridges separated by swampy areas. A

system of beaver ponds along a small stream occurs along the southeastern part of the property and a small lake is present on the east claim boundary.

North of the baseline and in the southwestern part of the claims the main forest cover is spruce with cedar in the low lying areas. In the east-central part of the property birch and poplar with some spruce are the main types of trees present.

3. REGIONAL GEOLOGY

Jacobson township is underlain by a thick assemblage of Early Precambrian-Archean-metavolcanics and lesser amounts of metasediments that in general trend east-west and dip steeply. Gabbroic to granodioritic stocks are intrusive into the metavolcanics, small felsic dikes are not uncommon and northwesterly striking diabase dikes cut all earlier units.

The metavolcanics, which are dominantly metabasalts with more felsic units in the southern part of the township have been folded into east-west trending folds whose axes strike easterly and plunge steeply. The felsic metavolcanics in the southern part of Jacobson township occur along the north limb of the Centre Lake anticline, a major regional structure.

In the region of the Chubb Option claims the metavolcanics are dominantly mafic in composition, trend approximately east-west and dip steeply.

4. SURVEY GRID

An approximately east-west baseline was chained and flagged along a previously cut and surveyed line along the southern boundary of claims SSM647055 through SSM647057. This line was extended, to the eastern boundary of the property. Cross-lines at 400 foot intervals were run north and south from this line to the claim

boundaries. A second baseline was established along the north boundary of claim SSM647066 and cross-lines were run south from this baseline to cover the claim.

5. MAGNETOMETER SURVEY

The magnetometer survey was carried out using a McPhar M700 Fluxgate magnetometer with readings being taken along the cross lines at 100 ft. intervals and 50 ft. intervals in some areas. A base station was established at the baseline and L66E with a value of 1610 nT.

The baseline was surveyed to establish secondary base stations at the intersection of each survey line and the baseline. The property was surveyed in loops along the north-south lines with tie-ins at the secondary base stations on the base line. Secondary base station tie-ins varied between 45 and 90 minutes. Readings were corrected for drift by comparison with the secondary base station readings at the beginning and end of each loop. The corrected values were plotted and contoured on the accompanying magnetometer survey map.

5.1 MAGNETOMETER SURVEY RESULTS AND INTERPRETATION

The corrected values range from a low of -2970 nT to a high of 14980 nT with values generally being in the 1500 nT to 4500 nT range.

A band of high values, (2000 to 14980nT) approximately 500 feet wide stretches across the northern part of the claims with an east-west to east-southeast trend. South of this band is a zone of generally lower values (1500-1800nT) approximately 600 feet wide. These two areas are considered to represent relatively thick mafic metavolcanic flows with different magnetic signatures.

In claims SSM647061, 647062 and 647063, the magnetic values produce a series of magnetic ridges and troughs,

100 to 200 feet wide, with an east-southeast direction. These features are probably due to a series of thin mafic metavolcanic flows whose magnetic expression varies from flow to flow.

A linear feature as evidenced by the 2000nT contour is present from L74E:9S to L99E:8S and this corresponds to the projected location of an east-northeast trending shear zone from claims to the west. South of this feature the magnetics show an east-west trend with linear highs separated by broad areas of lower values. This area is considered to be underlain by mafic metabasalts with the highs being due to individual magnetite-rich flows or mafic intrusives.

6. SUMMARY AND CONCLUSIONS

The property was surveyed with a McPhar M700 flux-gate magnetometer and the results are presented in the accompanying map.

It is considered that the magnetometer survey shows the property to be underlain by a series of approximately east-west trending mafic metavolcanic flows and possibly some associated mafic intrusives. The survey indicates an east-northeast trending linear feature that coincides with the projected location of a shear zone on the adjacent claims to the west. North of this structure the magnetic trends are east-southeast and south of the structure the magnetics show an east-west orientation.

It is recommended that the property be geologically mapped and prospected with the magnetometer survey to be used as an aid in the geological interpretation of the property. The magnetometer survey does not appear to specifically indicate any areas of economic interest.

Respectfully submitted,

L.D.S. Winter

L.D.S. Winter

B.A.Sc., M.Sc., F.G.A.C.

May 30, 1984



CERTIFICATE OF QUALIFICATION

I, Lionel Donald Stewart Winter do hereby certify:

1. that I am a geologist and reside at 1849 Oriole Drive, Sudbury, Ontario, P3E 2W5,
2. that I am a Fellow of the Geological Association of Canada,
3. that I graduated from the University of Toronto in Mining Engineering in 1957 with a Bachelor of Applied Science and from McGill University, Montreal in 1961 with a Master of Science (Applied) in Geology,
4. that I have practised my profession continuously for 25 years,
5. that my report for Cline Development Corporation, Chubb Option Claims, Jacobson Township, Ontario dated May 30, 1984 is based on field work carried out by and/or supervised by me during the period March 29 to April 4, 1984.

L.D.S. Winter
B.A.Sc., M.Sc., F.G.A.C.
May 30, 1984

L.D.S. Winter



Personnel Names, Addresses, Man-Days

<u>Name</u>	<u>Address</u>	<u>Man-Days</u>
K. Krause	1819 Oriole Drive, Sudbury, Ontario.	3.5
L.D.S. Winter	1849 Oriole Drive, Sudbury, Ontario.	3.5

Line-cutting & Flagging

K. Krause	1819 Oriole Drive, Sudbury, Ontario.	3.5
L.D.S. Winter	1849 Oriole Drive, Sudbury, Ontario.	3.5

Reports and Map

L.D.S. Winter	1849 Oriole Drive, Sudbury, Ontario.	2.5
P.M. Winter	1849 Oriole Drive, Sudbury, Ontario	1



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900

Mining Lands Section

File No 2-6836

Control Sheet

TYPE OF SURVEY

- GEOPHYSICAL
- GEOLOGICAL
- GEOCHEMICAL
- EXPENDITURE

MINING LANDS COMMENTS:

Darg
Signature of Assessor

24/07/84
Date

LD



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.

Type of Survey(s) MAGNETOMETER
Township or Area JACOBSON TOWNSHIP
Claim Holder(s) GLINE DEVELOPMENT
CORPORATION
Survey Company WINTERBOURNE EXPLORATIONS LTD.
Author of Report L.D.S. WINTER
Address of Author 1849 ORIOLE DRIVE, SUDBURY.
Covering Dates of Survey MARCH 29 TO APRIL 4: 1984
(linecutting to office)
Total Miles of Line Cut 12.4

MINING CLAIMS TRAVERSED
List numerically

- SSM 647055
(prefix) (number)
- SSM 647056
- SSM 647057
- SSM 647058
- SSM 647059
- SSM 647060
- SSM 647061
- SSM 647062
- SSM 647063
- SSM 647064
- SSM 647065
- SSM 647066

If space insufficient, attach list

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
 - Radiometric _____
 - Other _____
- Geological _____
- Geochemical _____

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

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

DATE: May 31/84 SIGNATURE: L.D.S. Winter
Author of Report or Agent

Res. Geol. _____ Qualifications 2.1503

Previous Surveys

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 12

RECEIVED

JUN 07 1984

MINING LANDS SECTION

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations ~~513~~ 593 Number of Readings 633
Station interval 100 FT. Line spacing 400 FEET.
Profile scale NOT USED.
Contour interval 500 nT.

MAGNETIC

Instrument M-~~PHAR~~ M700 FLUXGATE MAGNETOMETER
Accuracy - Scale constant 20 nT. ON FULL SCALE = 1000 nT
Diurnal correction method ~~LINE - LOOPS RUN WITH TR-21 TO SECONDARY BASE STATIONS.~~
Secondary base stations established on BL at each cross
Base Station check-in interval (hours) 0.75 TO 1.5 HOURS
Base Station location and value BL & L66+00E : 1610 nT.

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 _____



Ministry of Natural Resources

Report of Work (Geophysical, Geological, Geochemical and Expenditures)

#125-84 2.6836

The Mining Act

- Instructions: - Please type or print. - If number of mining claims traversed exceeds space on this form, attach a list. Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns. - Do not use shaded areas below.

June 11 F.W.M.

Form header containing: Type of Survey(s) MAGNETOMETER, Claim Holder(s) CLINE DEVELOPMENT CORPORATION, Address 174 DOUGLAS STREET W., SUDBURY, ONTARIO, P3E 1G1, Survey Company WINTERBOURNE EXPLORATIONS LTD., Date of Survey (from & to) 30 03 84 to 04 04 84, Total Miles of line CHAINED AND FLAGGED 12.6, Name and Address of Author (of Geo-Technical report) L.D.S. WINTER, 1849 ORIOLE DRIVE, SUDBURY, ONTARIO, P3E 2W5

Table for Special Provisions, Man Days, and Airborne Credits. Special Provisions: For first survey: Enter 40 days. For each additional survey: Enter 20 days. Man Days: Complete reverse side and enter total(s) here. Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.

Table for Mining Claims Traversed (List in numerical sequence). Columns: Mining Claim Prefix, Mining Claim Number, Expend. Days Cr. List includes claims 647055 through 647066.

RECEIVED MAY 3 1984 MINING LANDS SECTION

BAULT STE. MARIE MINING DIV. RECEIVED APR 11 1984 A.M. 7:8 | 9:10 | 11:12 | 1:2 | 3:4 | 5:6 P.M.

Expenditures (excludes power stripping) section with a calculation box: Total Expenditures \$ + 15 = Total Days Credits

Total number of mining claims covered by this report of work. 12

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only section with fields for Total Days Cr. Recorded (480), Date Recorded (April 11/84), and Mining Recorder signature.

Date April 9, 1984 and Reported Holder or Agent (Signature) Stewart Taylor

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

Name and Postal Address of Person Certifying: L.D.S. WINTER; 1849 ORIOLE DR., SUDBURY, ONTARIO, P3E 2W5. Date Certified April 9: 84. Certified by (Signature) L.D.S. Winter.

1984 07 03

Your File: 125
Our File: 2.6836

Mrs. M.V. St. Jules
Mining Recorder
Ministry of Natural Resources
875 Queen Street East
P.O. Box 669
Sault Ste. Marie, Ontario
P6A 5N2

Dear Madam:

We have received reports and maps for a Geophysical (Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims 88M 647055 et al in the Township of Jacobson.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416) 965-1380

A. Barr:sc

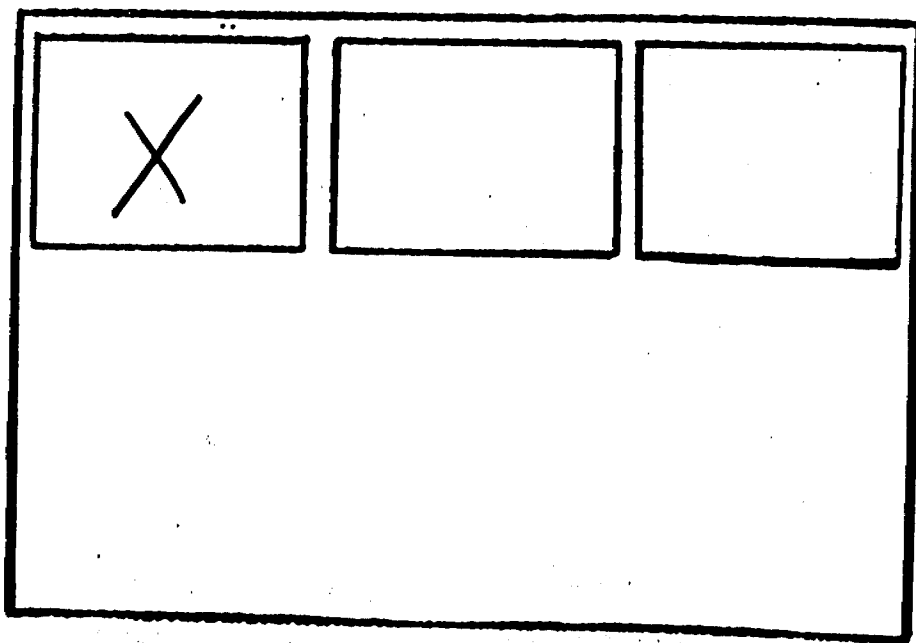
cc: Cline Development Corporation
174 Douglas St W
Sudbury, Ontario
P3E 1G1

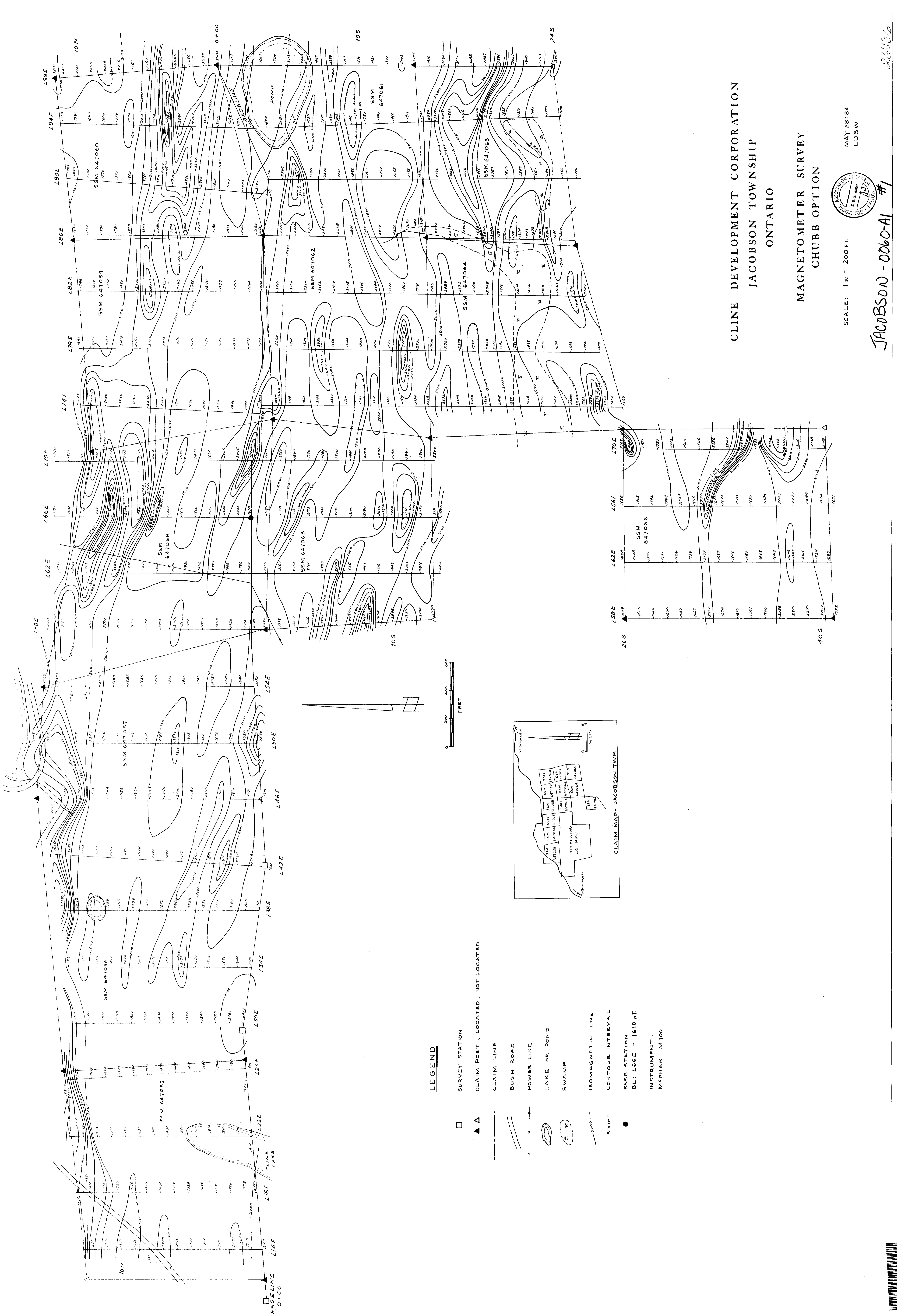
cc: L.D.S. Winter
1849 Oriole Drive
Sudbury, Ontario
P3E 2W5

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

JACOBSON-0060-A1 #1

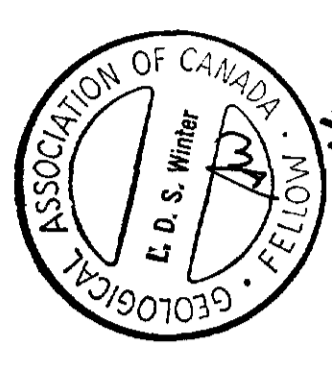
LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)





CLINE DEVELOPMENT CORPORATION
 JACOBSON TOWNSHIP
 ONTARIO
 MAGNETOMETER SURVEY
 CHUBB OPTION

SCALE: 1 IN = 200 FT.
 MAY 28, 1984
 LDSW



JACOBSON - 0060-A1

26836