



42C08SW0081 0062A1 JACOBSON

010

GEOLOGICAL SURVEY

CLINE DEVELOPMENT CORPORATION

CHUBB OPTION CLAIMS

JACOBSON TOWNSHIP

ONTARIO

RECEIVED

NOV 27 1984

MINING LANDS SECTION

L.D.S. Winter

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

October 17, 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 geological survey of the property and this was done during the period September 20, 1984 to September 26, 1984.

The following report outlines the work done, presents the results obtained and presents a preliminary interpretation of the bedrock geology of the property.

2. PROPERTY

2.1 LOCATION

The Chubb claim group of Cline Development Corporation is located in central Jacobson township at approximately 48°-19' N latitude, 84°-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.

The property is well forested with birch, poplar, spruce, jackpine and cedar as indicated on the enclosed geological map. On the ridges there is a heavy undergrowth of scrub maple which generally limits vision to a few tens of feet.

3. METHOD OF SURVEY

A grid consisting of baselines along the southern boundary of claims SSM 647055 to SSM 647060 and the northern boundary of claim SSM 647066 as well as north-south lines at 400 foot intervals had previously been placed on the property. These north-south lines were traversed and due to the limited visibility caused by the thick undergrowth the areas between the lines were also traversed and outcrops trenches etc. were tied into the north-south lines.

4. 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.

5. PROPERTY GEOLOGY

The property consists of generally east-west trending ridges covered with a relatively thin layer of moraine separated by areas of swamp. Rock exposure is limited and is mainly present in the north central and eastern parts of the property and along the south claim boundary.

Two main rock types were observed on the property; mafic metavolcanic flows and tuffs and, felsic dikes. The mafic metavolcanics consist of an approximately east-west trending and steeply dipping sequence of flows which in general are fine to very fine grained, dark green to grey-green in colour and massive to moderately foliated parallel to the regional foliation. One exception to this is the unit or units represented by outcrops between lines 46E and 50E and 500 ft. south of the north claim boundary and outcrops on L82E at 18+00S and L86E at 15+00S. It would require some structural dislocation to correlate these outcrops as one unit but their appearance is very similar and sufficiently unique relative to the other units that they can be described together. They consist of a massive, medium grained mafic metavolcanic with randomly located clots or phenocrysts of white feldspar up to 3-4 mm in diameter that weather in relief. This rock also contains elliptical concentrations of massive epidote up to 15 cm in diameter as well as veinlets and stringers of epidote up to 5 mm wide.

The only exposure of mafic tuff is that just north of the north claim boundary at L54E. Here a very thinly laminated, dark green (chloritized) tuff is present.

An outcrop on the powerline just north of the north claim boundary and 200 ft. west of L66E shows a flow top breccia and finer hyaloclastite fragments.

The magnetics show a band of high values approximately 500 feet wide trending east-west to east-southeast

across the northern part of the claims with another parallel band of low values 600 feet wide to the south. These bands are considered to represent two thick mafic metavolcanic flows or units with different magnetic signatures. The outcrop of massive epidote-bearing metavolcanic described above between lines 46E and 50E occurs within the southern band of low magnetics. The southern 6 claims show a series of narrow east-west trending magnetic ridges and troughs which are interpreted to be relatively narrow intercalated mafic metavolcanic units. There are too few outcrops in this area to verify this interpretation.

A number of fine grained felsite dikes were observed on the property. These dikes are white weathering and are composed of fine grained quartz and feldspar with or without 2-3 mm phenocrysts of quartz. The dikes usually parallel the foliation (east-southeast), are steeply dipping and are up to a few tens of feet wide.

Most of the rocks show an east-west to east-southeast and steeply dipping foliation which shows as a faint layering of minerals to a well developed cleavage or schistosity.

A set of vertical joints trending N45°E is present in the northern part of the property and small scale offsets suggest a late stage of northeast trending faulting.

6. ECONOMIC GEOLOGY

A number of old trenches are present in the south central part of claim 647064 just south of an east-west trending swamp. These trenches show a zone of sheared, carbonatized, silicified and pyritized metavolcanics trending S80°E and dipping steeply north. There are also some small quartz veins and felsite dikes present in this zone. It is considered that this is the Markes showing which dates from the 1930's when surface trenching and diamond drilling outlined a gold-bearing zone over a

strike length of over 200 feet and to a depth of 181 feet. The main part of this zone is reported to assay 0.17 oz Au per ton across an average of 16 feet for a strike length of 150 feet. (Assessment Files).

Gold values are also reported from the northwest corner of claim 647064 and claims 647066 and 647060. (Assessment Files). No trenching could be located on these last two claims that would correlate with this information however the thick undergrowth could easily have hidden old trenches.

7. SUMMARY AND RECOMMENDATIONS

The property was geologically mapped and the results are presented in the accompanying map.

The property is underlain dominantly by mafic metavolcanic flows that in general trend east-west to east-southeast and dip steeply.

The magnetics show a series of east-west trending magnetic ridges and troughs in the southern part of the property which when correlated with the geology suggest a sequence of mafic flows and probably some pyroclastics with varying magnetic signatures. In the northern 6 claims there appears to be two main units; to the north a 500 ft. thick unit with high magnetics and to the south a 600 ft. unit with lower magnetic readings.

A number of narrow felsite dikes were mapped on the property. These generally trend parallel to the foliation and dip steeply.

The old trenches and some of the drill collars associated with the Markes showing were located in the southern part of claim SSM 647064. To re-evaluate this showing it is recommended that the area be stripped, mapped and sampled as a basis for further work.

Most of the property is covered by an extensive

overburden cover. To adequately evaluate the claims it is recommended that further work should consist of;

1. Power stripping to evaluate areas of old trenching.
2. Geochemical soil sampling of the areas not covered by swamp (approximately 65% of the property is emenable to geochemical soil sampling).
3. Induced polarization survey.

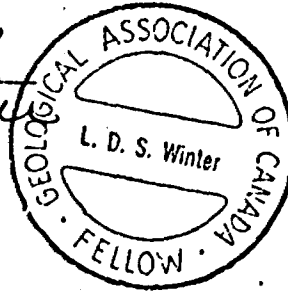
Respectfully submitted,

L.D.S. Winter

L.D.S. Winter

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

October 17, 1984



Personnel Names, Addresses, Man-Days

<u>Name</u>	<u>Address</u>	<u>Man-Days</u>
<u>Geological Mapping</u>		
L.D.S.Winter	1849 Oriole Drive, Sudbury, Ontario, P3E 2W5	7
<u>Report and Maps</u>		
L.D.S.Winter	1849 Oriole Drive, Sudbury, Ontario P3E 2W5	3
P.M.Winter	1849 Oriole Drive, Sudbury, Ontario P3E 2W5	1

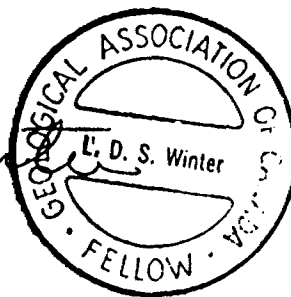
CERTIFICATE OF QUALIFICATION

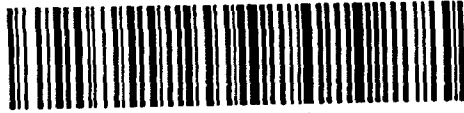
I, Lionel Donald Stewart Winter do hereby certify:

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 over 25 years,
5. that my report for Cline Development Corporation, Chubb Option Claims, Jacobson Township, Ontario, dated October 17, 1984 is based on field work carried out by me during the period September 20, 1984 to September 26, 1984.

L.D.S. Winter,
B.A.Sc., M.Sc, F.G.A.C.
October 17, 1984.

LDS Winter





42C085W0081 0062A1 JACOBSON

900

Mining Lands Section

File No 27473

Control Sheet

TYPE OF SURVEY

- GEOPHYSICAL
- GEOLOGICAL
- GEOCHEMICAL
- EXPENDITURE

MINING LANDS COMMENTS:

H.D. led

S. Lust

Signature of Assessor

84-11-28

Date



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) Geological
Township or Area Jacobson Township
Claim Holder(s) Cline Development Corporation

Survey Company Winterbourne Explorations Ltd
Author of Report L.D.S. Winter
Address of Author 1849 Oriole Drive, Sudbury, P3E 2W5
Covering Dates of Survey Sept. 20 to Sept. 26, 1984
(linecutting to office)
Total Miles of Line Cut no lines cut - previous grid

MINING CLAIMS TRAVERSED
List numerically

SSM647055	(prefix)	(number)
647056		
647057		
647058		
647059		
647060		
647061		
647062		
647063		
647064		
647065		
647066		

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

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

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

DATE: Nov. 19/84 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

OFFICE USE ONLY

If space insufficient, attach list



Ministry of
Natural
Resources

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

#233-84

2.7473

The Mining Act

Instructions: - Please type or print. *De. 84. F.W.M.*
- 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.

Type of Survey(s) Geological mapping	Township or Area Jacobson Twp
Claim Holder(s) Cline Development Corporation	Prospector's Licence No. T - 1373 -
Address 174 Douglas Street W., Sudbury, Ontario. P3E 1G1	
Survey Company Winterbourne Explorations Ltd.	Date of Survey (from & to) 20 09 84 26 09 84
Total Miles of line Cut Nil	
Name and Address of Author (of Geo-Technical report) L.D.S. Winter, 1849 Oriole Drive, Sudbury, Ontario P3E 2W5	

Credits Requested per Each Claim in Columns at right			Mining Claims Traversed (List in numerical sequence)		
Special Provisions	Geophysical	Days per Claim	Mining Claim		Expend. Days Cr.
			Prefix	Number	
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic		SSM	647055	
	- Magnetometer			647056	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric			647057	
	- Other			647058	
	Geological	20		647059	
	Geochemical			647060	
Man Days Complete reverse side and enter total(s) here	- Electromagnetic			647061	
	- Magnetometer			647062	
	- Radiometric			647063	
	- Other			647064	
	Geological			647065	
	Geochemical			647066	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic				
	Magnetometer				
	Radiometric				

RECEIVED
OCT 16 1984
MINING LINES SECTION

SAULT STE. MARIE
MINING DIV.
RECEIVED
OCT 9 1984
A.M. P.M.
7 8 9 10 11 12 1 2 3 4 5 6

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

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ + 15 = Total Days Credits

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.

Date **Oct 5, 1984** Recorder/Holder or Agent (Signature) *L.D.S. Winter*

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
240	Oct. 9/84	<i>[Signature]</i>
	Date Approved or Recorded	Blanchet Recorder
	84.11.28	<i>[Signature]</i>

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 Drive, Sudbury, Ontario. P3E 2W5

Date Certified **Oct 5: 84** Certified By (Signature) *L.D.S. Winter*

CLINE DEVELOPMENT CORPORATION

174 Douglas St. W.
Sudbury, Ontario P3E 1G1

(705) 673-5560

November 22, 1984

Superintendent, Mining Lands Section,
Ministry of Natural Resources,
Lands Management Branch,
Rm 6451 - Whitney Block,
99 Wellesley St. W.,
Toronto, Ontario.
M7A 1W3

Gentlemen:

Please find enclosed 2 copies of a geological report on 12 claims held by Cline Development Corporation in Jacobson Township, District of Algoma, Ontario. The claims are SSM647055 to 647066 inclusive.

Yours truly,
Cline Development Corporation

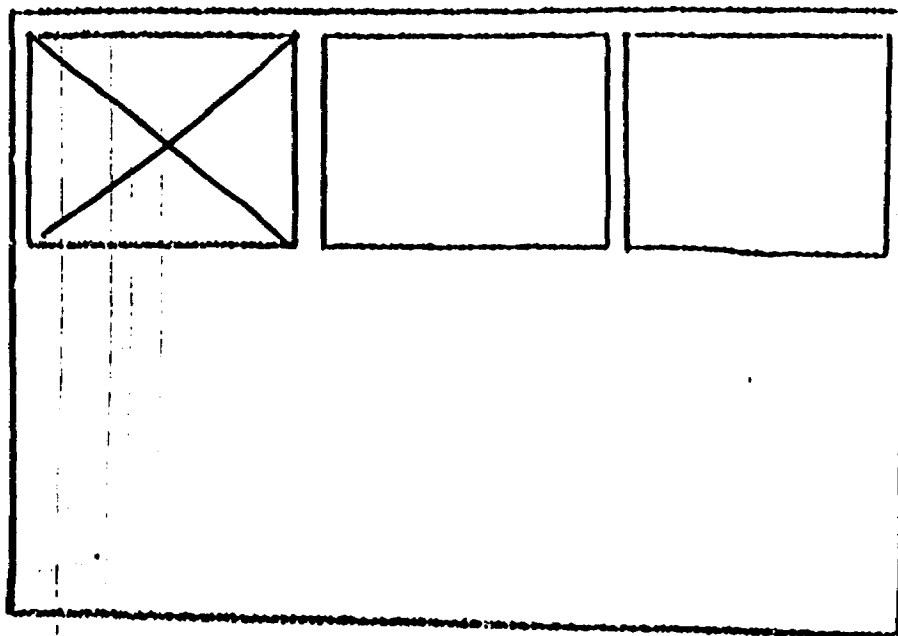
per. Allan J Taylor
Allan J. Taylor

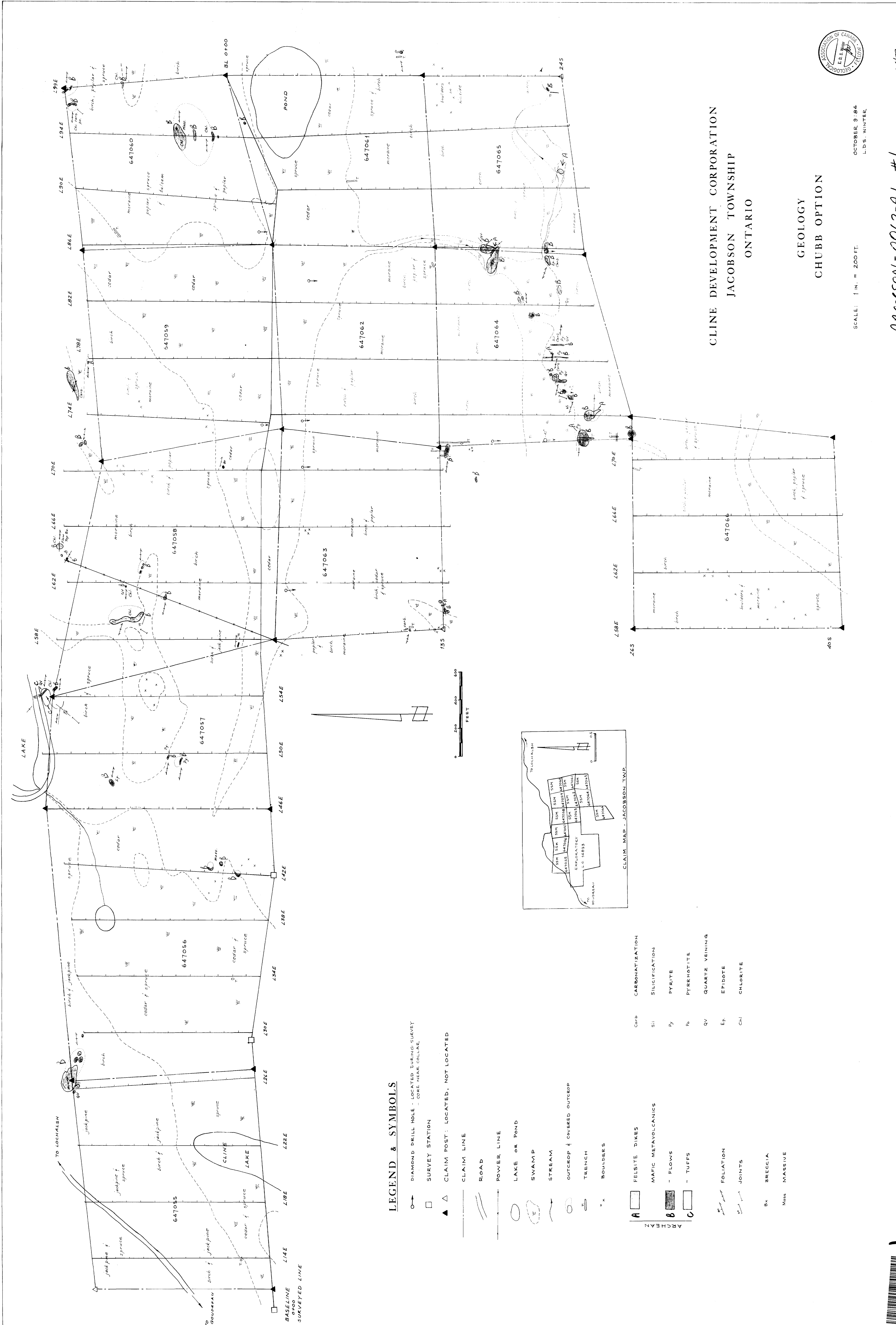
AJT:pmw

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

JACOBSON-0062-A1, #1

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





LEGEND & SYMBOLS

- DIAMOND DRILL HOLE - LOCATED, TUBING SURVEY
- CORE HOLE COLLAR
- SURVEY STATION
- ▲ CLAIM POST: LOCATED, NOT LOCATED
- CLAIM LINE
- ROAD
- POWER LINE
- LAKE OR POND
- SWAMP
- STREAM
- OUTCROP & COVERED OUTCROP
- TRENCH
- × BOULDERS

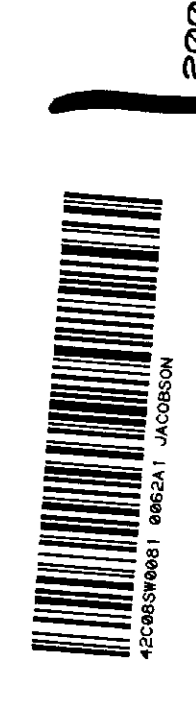
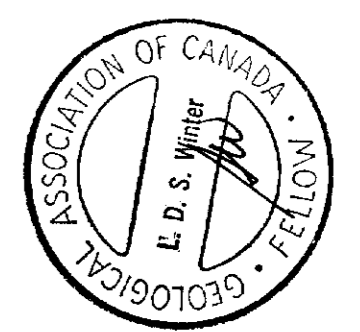
A	FELSITE DIKES	Carb	CARBONATIZATION
B	MAFIC METAVOLCANICS	Si	SILICIFICATION
C	- FLOWS	Py	PYRITE
	- TUFFS	Pb	PYRRHOTITE
	FOLIATION	QV	QUARTZ VEINING
	JOINTS	EP	EPIDOTE
		Ch	CHLORITE
		Bx	BRECCIA
		Moss	MOSS

CLINE DEVELOPMENT CORPORATION
 JACOBSON TOWNSHIP
 ONTARIO

GEOLOGY
 CHUBB OPTION

SCALE: 1 IN. = 200 FT.

OCTOBER 9, 84
 L.D.S. WINTER



JACOBSON-0062-A1, #1