

INDUCED POLARIZATION AND MAGNETOMETER SURVEY

PROPERTY:

LEE GROUP

Lee	1-5 inclusive
Blueberry	1-8 inclusive
Buck	1-4 inclusive
S and W	1-4 inclusive
Dude	1-4 inclusive

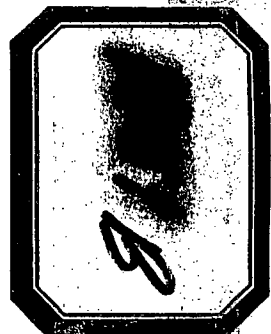
LOCATION: 15 Miles North of Nicola, B.C.
Co-ordinates: 50 120 S.W.

AUTHOR: J.B. Prendergast, M.A., P.Eng.

PERIOD: April 22-27, May 8, 1969

HOLDER: Ronald P. McBean

WORK DONE FOR: CHISHOLM PROSPECTION LTD. (NPL)



1851

PART 2

CONTENTS

	<u>Page</u>
INTRODUCTION	1
DESCRIPTION OF PROPERTY	2
ACCESS	2
WATER AND TIMBER	2
FIELD METHOD	3
Induced Polarization	
Magnetics	
DISCUSSION OF RESULTS	3
Magnetics	
Induced Polarization	
SUMMARY AND CONCLUSIONS	6
RECOMMENDATIONS	6

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 1851B MAP

REPORT
ON
INDUCED POLARIZATION AND MAGNETIC TEST SURVEY
FOR
CHISHOLM PROSPECTION LIMITED
MERRITT AREA, B.C.

INTRODUCTION

At the request of Mr. E. O. Chisholm, consulting geologist of Vancouver, B.C., Velocity Surveys Limited carried out a limited induced polarization - magnetometer test programme in the Mamette Lake area of British Columbia. Five lines were read with induced polarization for a total of 15,000 feet, using the three electrode array method and eight lines were read with a Fluxgate magnetometer for a total of 33,000 feet.

The results of the survey have been to indicate one positive location of anomalous chargeability, which appears on two lines and two other single point anomalies, one of which is cut off on both sides by adjoining lines and the other of which may continue to the east. The magnetic data, when correlated with the induced polarization work, indicates that both the two line induced polarization feature and the other chargeability anomaly open to the east are supported by magnetic highs. A third chargeability anomaly appears only on one line and has not been considered to be of any importance.

A recommendation has been made subject to a study of geological and geochemical data to complete the induced polarization work on the main anomaly and to run the adjacent line east of the single point anomaly.

DESCRIPTION OF PROPERTY

The property is known as the Lee group and consists of 25 located mining claims in the Merritt area of British Columbia.

The claims may be more particularly described as follows:

<u>Claim Name</u>	<u>Numbers</u>	<u>Total</u>
Lee	1 - 5	5
Blueberry	1 - 8	8
Buck	1 - 4	4
S and W	1 - 4	4
Dude	1 - 4	4
Total		25

The registered owner of these claims is a Mr. R.

P. McBean.

ACCESS

The claim group may be reached by driving north from Merritt along the Guichon Creek road, which follows the west side of Guichon Creek, for fifteen miles north of the town of Lower Nicola.

WATER AND TIMBER

Water for drilling would be available from Mamette Lake or Guichon Creek, which is 1000 feet from the claim group.

The timber consists of pine and jackpine; the growth is not dense. The area has been logged in the past, however there would still be sufficient timber remaining for diamond drill tripods.

FIELD METHOD

Induced Polarization

Using the Huntec 7.5 kw. induced polarization unit five short lines of readings were obtained using the three electrode array, that is two potential electrodes and one current electrode, with the other current electrode remote from the survey area. Electrode spacing was 400 feet. Readings of resistivity and chargeability were obtained at each station and plotted on the accompanying map. The results of the survey have been contoured and have been presented in plan form herewith.

Magnetics

Using a Sharpe MF 1 Fluxgate magnetometer and looping back to a base station magnetic readings were taken at 100 foot intervals along lines based at 400 feet. These lines cover a total length of 33,000 feet. The results of the magnetic survey have been plotted on a plan and contoured for presentation with this report.

DISCUSSION OF RESULTS

Magnetics

The contoured magnetic plan shows an area of reasonably high magnetic intensity with variations reaching a maximum of 4000 gammas above background. The magnetic configuration is

characteristic of an area of igneous activity where magnetite has been accumulated in zones by the processes of segregation, extrusion of basic volcanic material and later hydro thermal activity. Two main directions of magnetic lineation are recognized, the one in a north-westerly south-easterly direction and the other in an east-west to east-north-east, south-south-west direction. The largest magnetic anomaly is arcuate in shape and may be suggestive of a folded dike or contact - more likely the latter.

As a possible interpretation of the magnetic pattern it is suggested that the north-east corner of the survey area is underlain by an intrusive body which is in contact with volcanics covering the rest of said area. If such is the case, interesting geological target areas may be located at or near the intrusive contact. The following discussion of induced polarization results takes into account this observation.

Induced Polarization

Most of the induced polarization readings obtained are considered to be about background level for the area, that is a range between 1.0 and 2.5 milliseconds. There are three areas of anomalous chargeability which are discussed individually below and have been designated by the letters A, B and C.

Anomaly A This feature is located with its axis running from line 4+00W - 17+00N to line 0+00 - 19+00N. It is

closed off at the west end, however it is open to the east. The maximum values are in the 3.5 to 4.0 millisecond range, which puts them at approximately twice the local background. The anomaly could be due to weak sulphide mineralization and is located very close to the suggested intrusive volcanic contact. If such is the case then the geological environment must be considered to be favourable; it is also understood that there are two anomalous geochemical values on line 0 within 100 feet of the peak of this particular feature - these would lend support to the above observations. The anomaly warrants further investigation.

Anomaly B

This anomaly is located at a single point at 4N on line 0+00 and is not substantiated by any value on line 4+00W, immediately adjacent. The anomaly lies along a magnetic trend to the south-east which crosses line 4+00E at 2N. The geology of this immediate area is encouraging and therefore this feature should be considered as a target of interest and bears further investigation. In magnitude it is somewhat less than twice the local background and if, in fact, it is a real feature then its cause could be attributed to disseminated sulphides associated with magnetite.

Anomaly C

This feature is located at station 6S on line 4+00W and it consists of a single reading of 3.0 milliseconds. There is no support for this feature on either of the lines adjoining nor in the magnetic results and therefore no particular importance can be attached to it. No further work is considered warranted in this instance.

SUMMARY AND CONCLUSIONS

Five lines were read with induced polarization equipment on the Lee claim group in the north Merritt area of British Columbia and as well eight lines were read with a magnetometer. The result of the survey was the disclosure of three separate conditions of anomalous chargeability, two of which are related to magnetic features that may indicate a favourable geological environment. Of these, anomaly A is considered to be of prime importance and anomaly B, because of its association with favourable geology and a magnetic feature, must also be considered worth evaluating further.

Considering the prime geological importance of this general area it is felt that further work on the property is warranted. Such work has been set out in the recommendations that follow.

RECOMMENDATIONS

In view of the foregoing discussion the following programme has been recommended for the Lee claim group:

1. Compare the geophysical results discussed herein with the geological and geochemical information available.
Estimated cost \$ 300.00

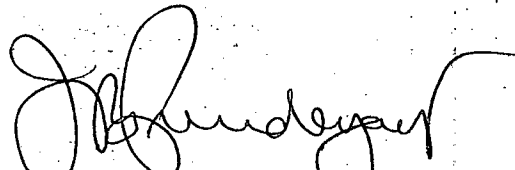
2. If the geological environment in which the anomalies noted occur, is considered to be favourable for disseminated sulphide occurrences, then further induced polarization work is recommended to follow up the results of this survey. Line 0 and 4W should be re-road from the base line north to 26N using a 200 foot electrode spacing and lines should be road to the east at 400 foot intervals to follow anomaly A.

Estimated cost for four
days surveying \$ 4,200.00

Following completion of the above programme and evaluation of results consideration should be given to drilling or trenching any areas of interest in order to sample them.

Respectfully submitted,

VELOCITY SURVEYS LIMITED,



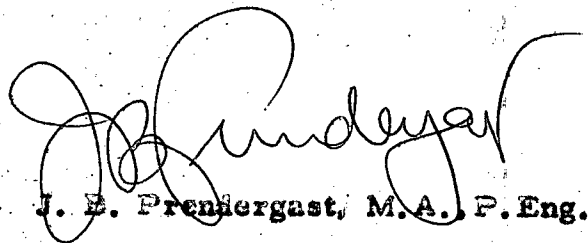
J. B. Prendergast, M.A., P. Eng.

CERTIFICATION

I, Joseph Benoit Prendergast, of the City of Calgary, Province of Alberta, hereby certify that:

1. I am a geophysicist-geologist with offices at 1323-43th Avenue, N.E., Calgary, Alberta.
2. I am a graduate of the University of Toronto, B. C. (Physics and Geology), M.A. (Geophysics) 1951.
3. I have been actively and continuously engaged in mineral exploration and development for 13 years.
4. I am a member of the Associations of Professional Engineers of Ontario, Manitoba, Alberta and British Columbia.
5. I have no interest, directly or indirectly, nor in the securities of, nor do I expect to receive any such interest in Chisholm Prospection Limited.
6. That this report is based on geophysical data derived from work carried out under my direct supervision on the property and from government publications relevant to the area.

Dated this 8th day of May, 1969, in the City of Calgary, Province of Alberta.


J. E. Prendergast, M.A., P. Eng.

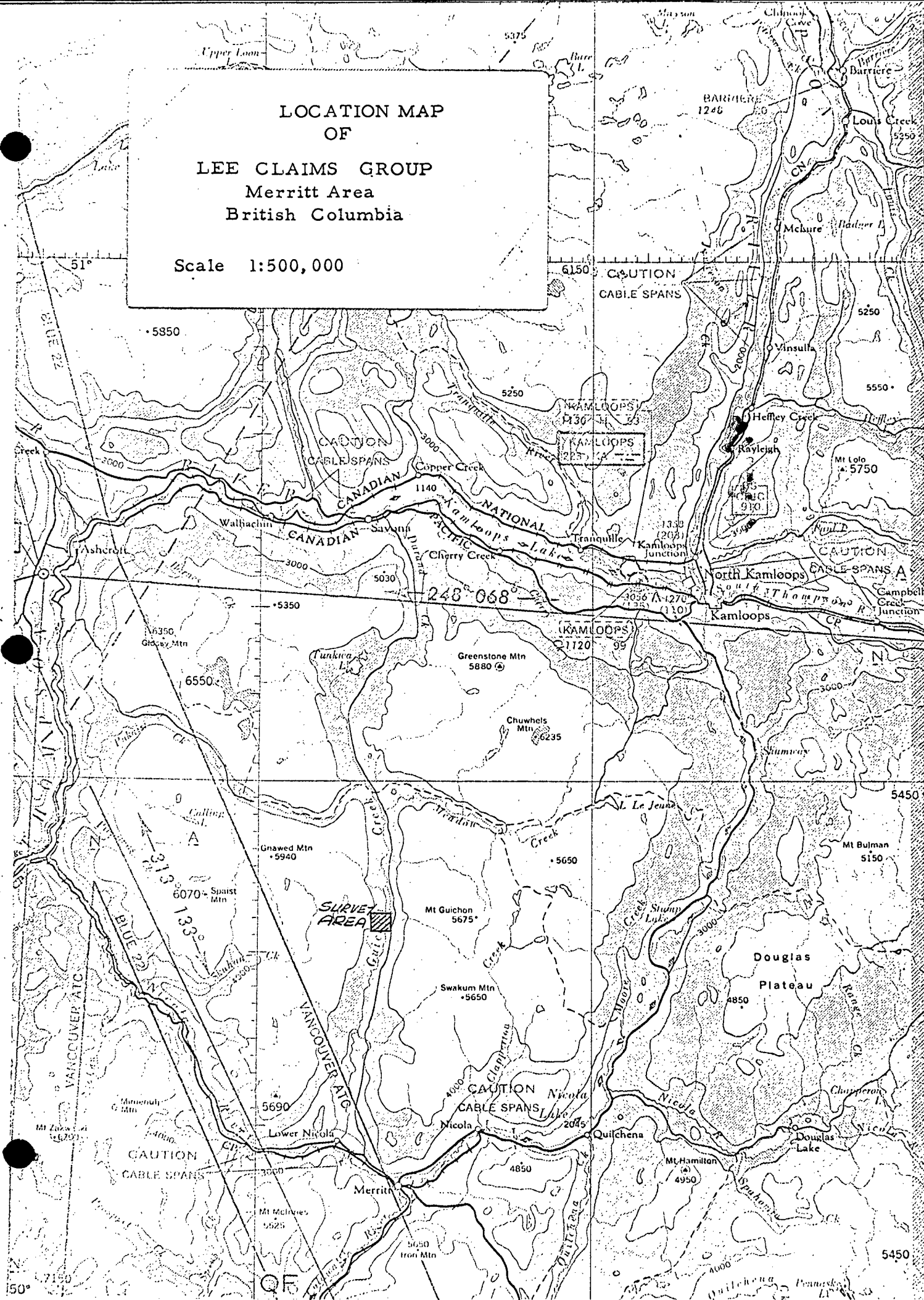
LIST OF PERSONNEL

J. Hollenberg	Magnetometer Operator	April 22-27, 1969	\$450.00/month
M. Mearns	I.P. Operator	April 23-26, 1969	\$400.00/month
D. Ragan	I.P. Assistant	April 23-26, 1969	\$400.00/month
B. Everett	I.P. Assistant	April 24-26, 1969	\$350.00/month

All of 824-602 W. Hastings Street, Vancouver, B.C.

LOCATION MAP
OF
LEE CLAIMS GROUP
Merritt Area
British Columbia

Scale 1:500,000



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. *1851B* MAP *1*

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

In the Matter of Assessment Work on
the Lee Group of claims, Nicola M. D., B. C.

To Wit:

I, Timothy Sadlier-Brown
of 2033 Comox Street, Vancouver

in the Province of British Columbia, do solemnly declare that

- 1/ The work described in the attached report was carried out on April 22-27, (6 days), 1969 on contract by four employees of Velocity Surveys Ltd., 824-602 W. Hastings St., Vancouver.
- 2/ The cost of a magnetometer survey over six and one-quarter line miles at \$75.00/LM was \$468.00.
- 3/ The cost of an IP Survey over three miles at \$450.00/LM was \$1350.00.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *23rd*
day of *May* 1969, A.D.

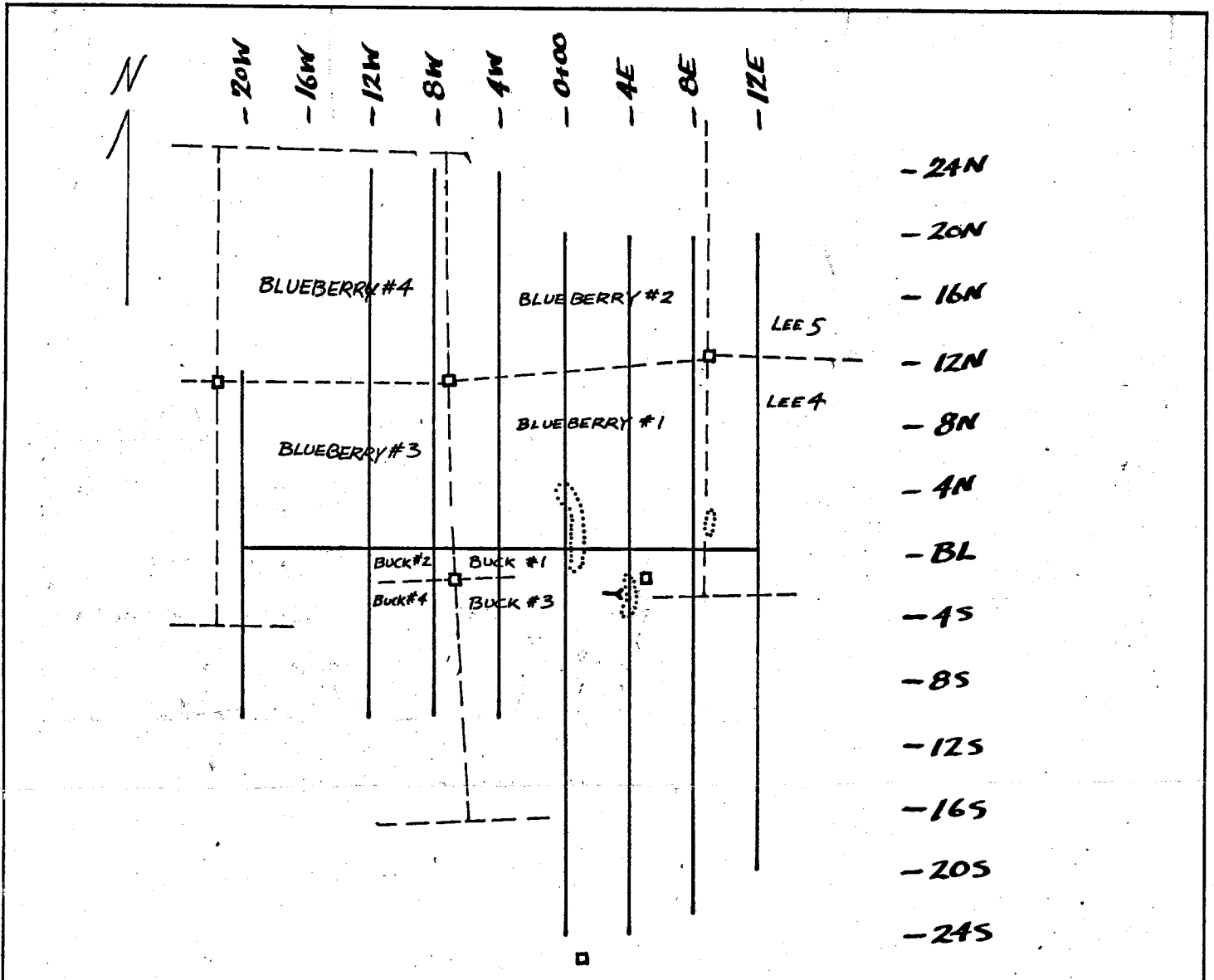
Timothy Sadlier-Brown

[Signature]
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.
Gold Commissioner

In the Matter of

.....
.....
.....
.....

Statutory Declaration
(CANADA EVIDENCE ACT)



MAP SHOWING SURVEY GRID AND CLAIM LOCATIONS
LEE GROUP, NICOLA M.D.

Scale 1000 ft = 1 inch

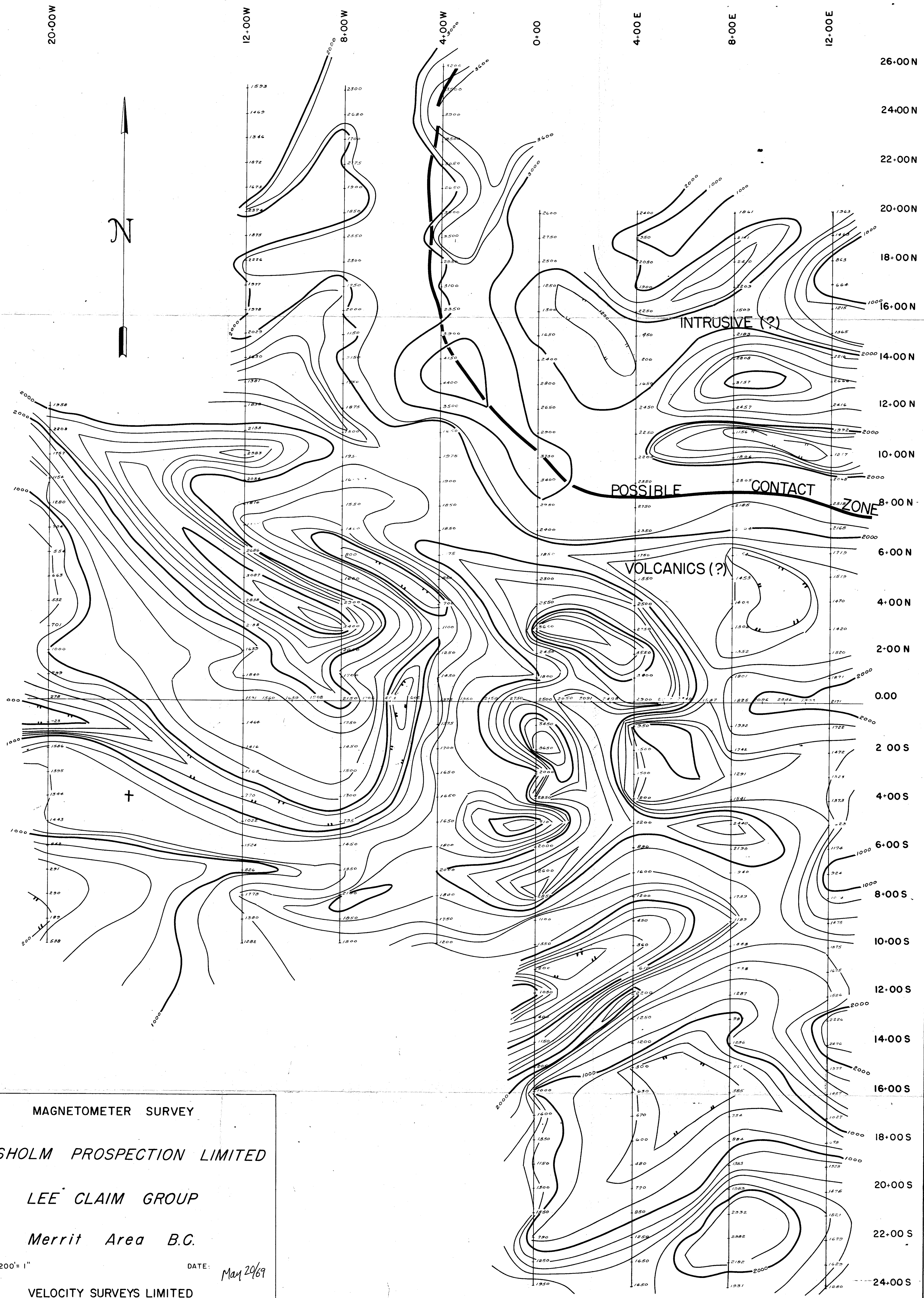
May 20th 1969

To accompany a geophysical report by Velocity Surveys Ltd.

Claim Post □
Adit ↗
Trench ⋯⋯⋯

Claim Boundary ---
Grid Line ==

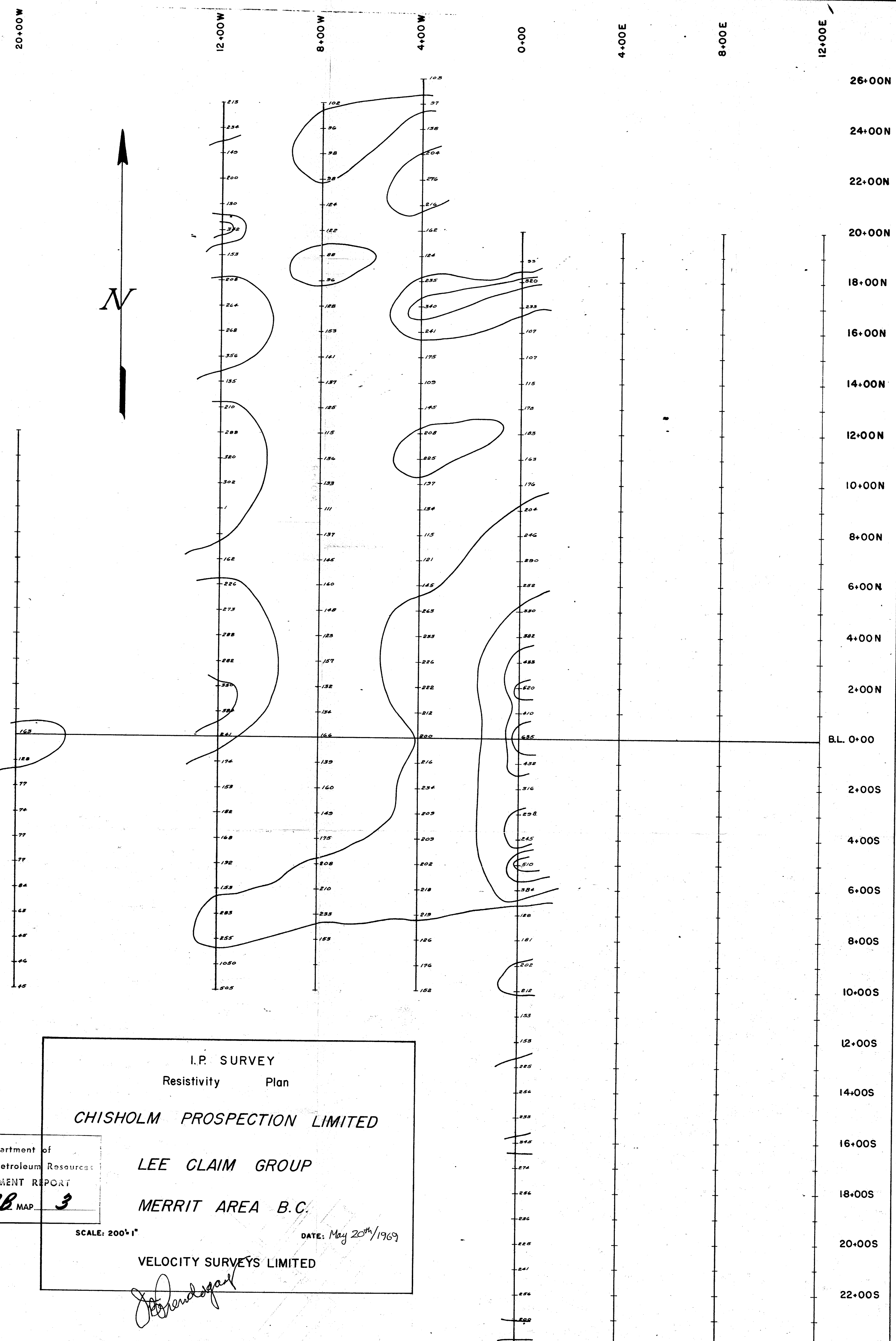
1851B



MAGNETOMETER SURVEY
 CHISHOLM PROSPECTION LIMITED
 LEE CLAIM GROUP
 Merrit Area B.C.
 SCALE: 200' = 1" DATE: May 20/69
 VELOCITY SURVEYS LIMITED

Department of report by J.B. BRENDERGAST
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1851B MAP 2
 Contour Interval 200 Gammas

1851B



I.P. SURVEY
Resistivity Plan

CHISHOLM PROSPECTION LIMITED

LEE CLAIM GROUP

MERRIT AREA B.C.

SCALE: 200' = 1" DATE: May 20th/1969

VELOCITY SURVEYS LIMITED

[Signature]

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **1851B** MAP **3**

Contour Interval 100 ohm metres

1851B

20+00 W

12+00 W

8+00 W

4+00 W

0+00

4+00 E

8+00 E

12+00 E

26+00 N

24+00 N

22+00 N

20+00 N

18+00 N

16+00 N

14+00 N

12+00 N

10+00 N

8+00 N

6+00 N

4+00 N

2+00 N

B.L. 0+00

2+00 S

4+00 S

6+00 S

8+00 S

10+00 S

12+00 S

14+00 S

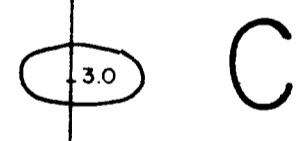
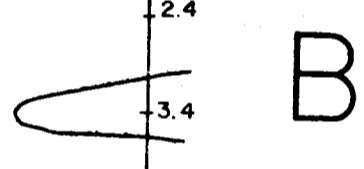
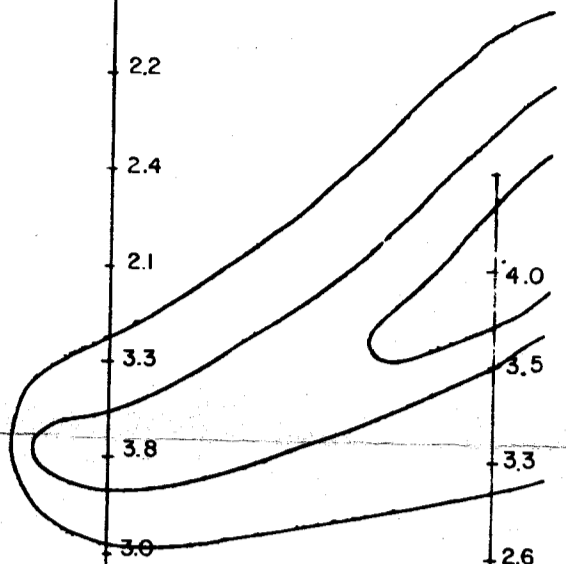
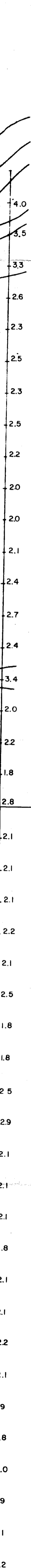
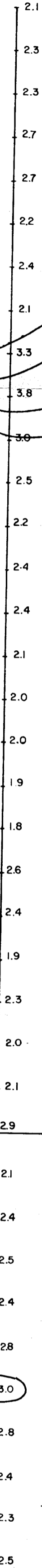
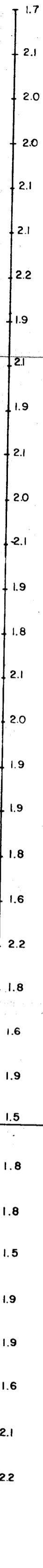
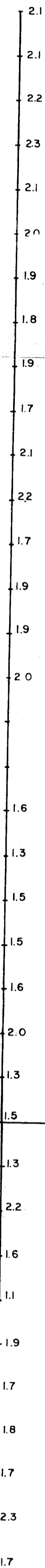
16+00 S

18+00 S

20+00 S

22+00 S

24+00 S



I.P. SURVEY
 Chargeability Plan
 CHISHOLM PROSPECTION LIMITED
 LEE CLAIM GROUP
 Merrit Area B.C.
 SCALE: 200' = 1" DATE: May 20/69
 VELOCITY SURVEYS LIMITED
 To accompany report by J.B. PRENDERGAST.

Department of
 Energy and Petroleum Resources
 ASSESSMENT REPORT
 NO. 11518 MAP 4

Contour Interval 0.5 millibars

11518