

3683 M-2

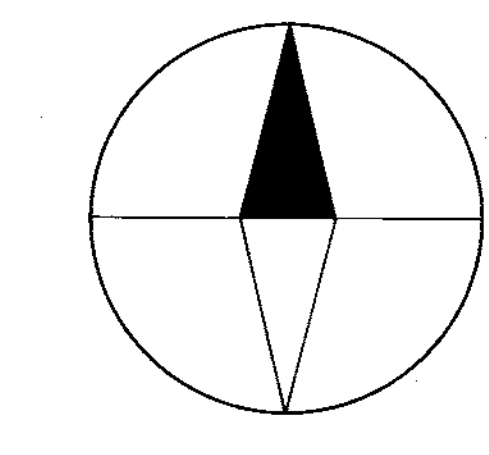
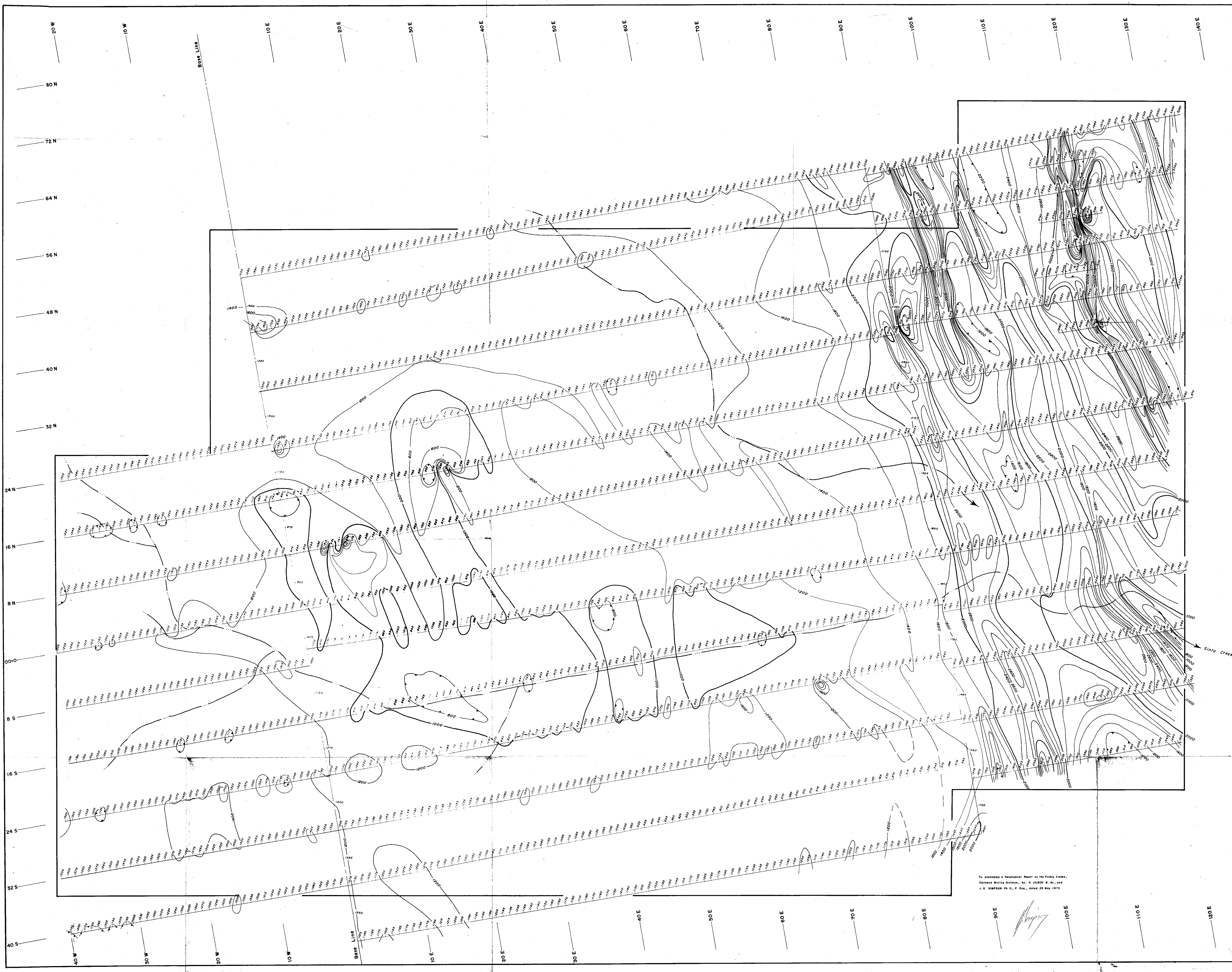
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3683 MAP #2

To accompany a Geophysical Report on the Friday Claims,  
Omineca Mining Division, by: G. JILSON B. Sc., and  
J. G. SIMPSON Ph. D., P. Eng., dated 25 May 1972

CALIENTE MINING CORP.  
FRIDAY CLAIMS  
Claims & Grid

SCALE: 1" = APPROX. 1/2 MILE

TRENCH ————



**Legend**

- 1000 Gamma Line
- 200 Gamma Line
- Magnetic Depression
- Property Line
- Stream

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3683 MAP #3

To accompany a Geophysical Report on the Friday Claims,  
Ontario Mining District, by G. J. DONALD, B. Sc., and  
A. G. SAMPSON, Ph.D., P. Eng., dated 28 May 1972

CALIENTE MINING CORP.

**MAGNETOMETER SURVEY**

FRIDAY CLAIMS

Scale	Work by	Date
1" = 400'	DONALD DEVELOPMENTS LTD.	MAY 10, 1972

# 3683

A REPORT ON A MAGNETOMETER  
SURVEY ON THE FRIDAY CLAIMS,  
OMINECA MINING DIVISION, B.C.

Covering

RED GROUP: Friday 1-12, 19-30, 33  
Friday #3Fr-8Fr.

GREEN GROUP: Friday 13-18, 31-32, 34-46  
Friday #1Fr-2Fr, Friday #9Fr-17Fr.

Located

45 miles northeast of Smithers

Lat., 55°20'N

Long., 126°12'W

93 M / 8 E

From

29 March - 11 April 1972

For

Caliente Mining Corporation

By

G. Jilson, B.Sc., and

J. G. Simpson, Ph.D., P.Eng.

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO	3683
	MAP

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#1 Property Location Map	Between 1 & 2
MAPS (In Back Pocket)	Scale
#2 1. Claim Map	1" = 2640'
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INTRODUCTION

This report describes a magnetometer survey conducted on the Friday claims from 29 March to 11 April 1972. The survey was carried out by Donegal Developments Ltd. on behalf of Caliente Mining Corporation. The purpose of the survey was to further define a marked aeromagnetic low on Federal - Provincial aeromagnetic map 5258G and to attempt to trace magnetic feldspar porphyry dikes known to carry traces of chalcopyrite.

LOCATION AND ACCESS

The Friday claims are located 45 miles northeast of Smithers in the Omineca Mining Division of British Columbia. The claims are on N.T.S. sheet 93M/8E at approximately 55°20'N - 126°12'W, 5 miles east of Friday Lake. Access is by helicopter from Smithers or Houston or by tote road extending from the north end of Hatchery Arm, Babine Lake.

CLAIMS

The property consists of 46 full size and 17 fractional mineral claims in two groups as follows:

Red Group

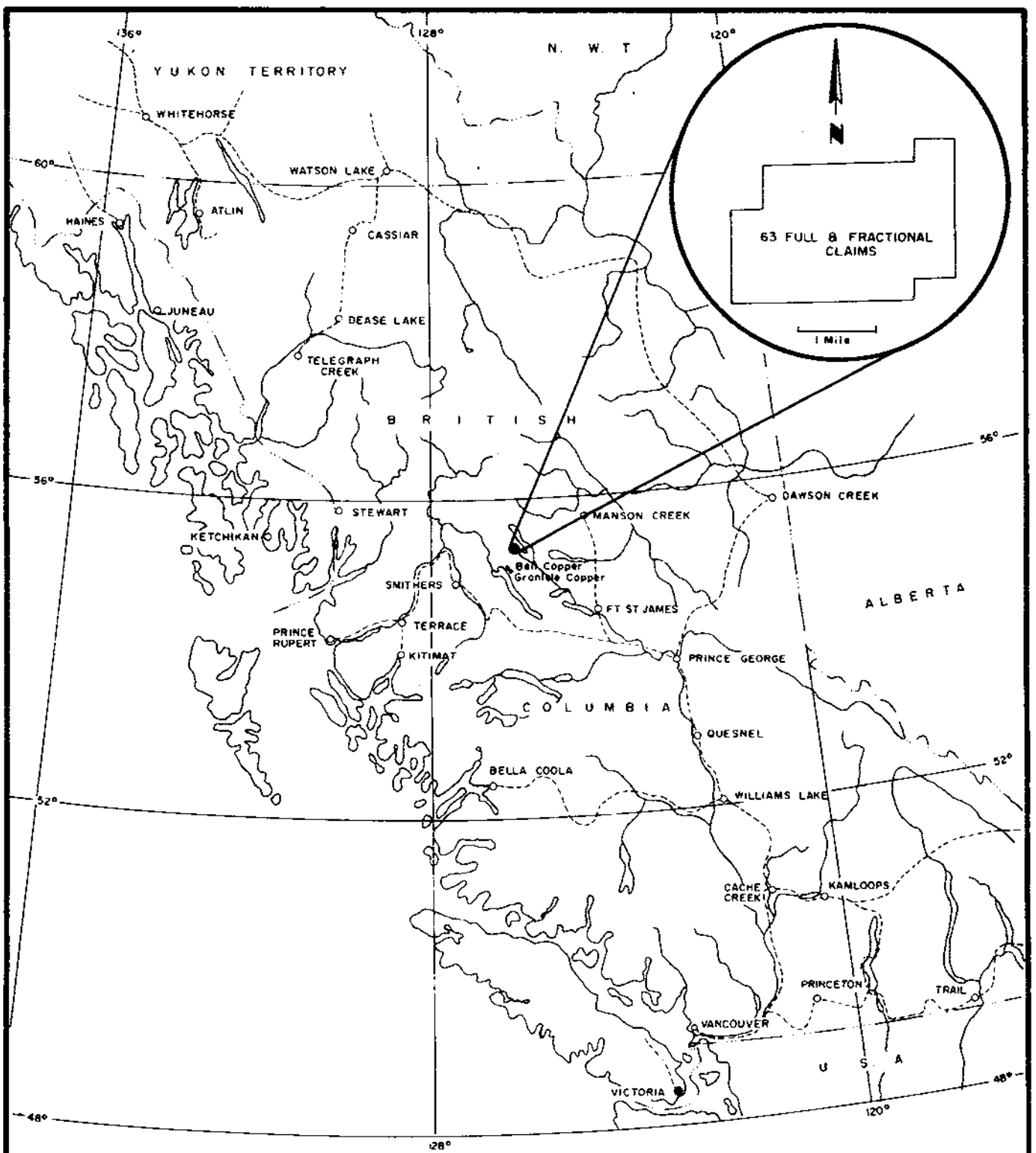
<u>Claim Name</u>	<u>Record Number</u>	<u>Record Date</u>	<u>Expiry Date</u>
Friday 1-12 incl.	96387R-96398R incl.	16 Dec. 1970	16 Dec. 1972
Friday 19-30 incl.	97966D-97977D incl.	6 Apr. 1971	6 Apr. 1973
Friday 33	99504G	23 June 1971	23 June 1972
Friday 3Fr-8Fr incl.	97982D-97987D incl.	6 Apr. 1971	6 Apr. 1973

Green Group

<u>Claim Name</u>	<u>Record Number</u>	<u>Record Date</u>	<u>Expiry Date</u>
Friday 13-18 incl.	97960D-97965D incl.	6 Apr. 1971	6 Apr. 1973
Friday 31 & 32	97978D & 97979D	6 Apr. 1971	6 Apr. 1973
Friday 34-46 incl.	99505G-99517G incl.	23 June 1971	23 June 1972
Friday 1Fr & 2Fr	97980D & 97981D	6 Apr. 1971	6 Apr. 1973
Friday 9Fr & 10Fr	97988D & 97989D	6 Apr. 1971	6 Apr. 1973
Friday 11Fr-17Fr incl.	99518G-99524G incl.	23 June 1971	23 June 1972

GEOLOGICAL SETTING

The claims are underlain by sediments and volcanics of lower to middle Jurassic age (B.C. Dept. Mines Map 69-1 units 4 and 5). The sedimentary unit comprises mudstone with minor sandstone and tuff and the volcanic unit green tuff and tuff breccia with subordinate agglomerate. The sediments display generally gentle dips and may be folded into a doubly plunging open syncline. The volcanic rocks also appear to be relatively



**CALIENTE MINING CORPORATION**  
**FRIDAY CLAIMS**

**PROPERTY LOCATION MAP**

BRITISH COLUMBIA  
 SCALE: 1" = 125 MILES

Department of  
Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 3683 MAP #1

flatlying. The two units probably have a tectonic boundary along a north-northwesterly trending fault contact. The sediments are intruded by a variety of porphyritic dikes of which a feldspar-biotite porphyry type contains traces of chalcopyrite. The sediments are commonly pyritic and in the vicinity of the feldspar-biotite porphyry contain pyrite located on late fractures. Except for slight silicification hydrothermal alteration products were not observed in the vicinity of the dikes or pyritized fractures.

#### PROCEDURE

The vertical component of the earth's magnetic field was measured by a Sharpe MF-1 fluxgate magnetometer at 100' intervals on lines spaced 800' apart. The entire claim block was covered on this 800' x 100' grid with some additional fill-in lines at the east edge of the property.

Diurnal drift was corrected for by checking in at previously established base stations at two hour intervals when possible.

#### RESULTS

The results of the survey outline two large, distinct magnetic units. The first is of low magnetic intensity and relief, the second of high relief with long narrow magnetic troughs and ridges. The first unit is west of 90E, the second east of 90E. The high relief unit probably reflects strongly magnetic flows and/or dikes in the volcanic unit. The contact between the two magnetic units does not conform to the sediment volcanic contact. This is not surprising since the tuffs and agglomerate which form the westernmost portion of the volcanic terrain are not perceptibly magnetic.

At the southeast corner of the property a broad low within the high relief unit may be of some significance. It occurs on line 40S from 100E to 120E and is the only clear departure from the trend of long ridges and troughs. This feature may be the edge of an alteration low. A linear trend of deflected contours extending south-southwesterly from 48N - 125E to 48S - 86E in the high relief unit may represent a fault.

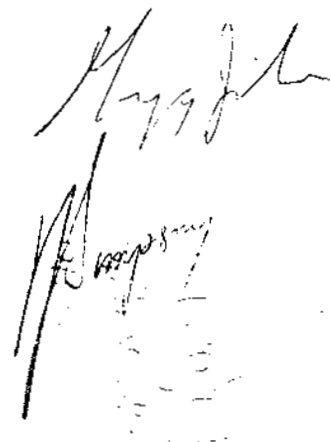
A few small highs, and highs with flanking lows in the low relief unit, probably reflect the presence of magnetic porphyry dikes. The complex at 8N 10E is due to a known biotite feldspar porphyry and adjacent feldspar porphyry. This is also the area of fracture-bound pyrite, thus the rather large low surrounding the high may be a minor alteration low. The complex at 16N 25E is of similar shape but larger and probably arises from a somewhat larger dike.



A certain amount of line bias is apparent in the results suggesting that the corrections applied have not been sufficient. An extreme case on 40S from 40E to 90E may actually be due to an instrument malfunction. This portion of line 40S was not included when contouring the map.

CONCLUSIONS AND RECOMMENDATIONS

The magnetic survey has not delineated any large and well defined targets for further exploration. It is recommended that a limited program of geology and geochemistry be carried out to assist in further interpretation of the results of the magnetic survey. Emphasis should be placed on the magnetic complex at 16N 25E and the southeast corner of the property.

Handwritten signatures and initials in the bottom right corner of the page. The top signature appears to be 'M. J. ...' and the bottom signature is more stylized and less legible.

APPENDIX (i)

TIME AND COST DISTRIBUTION

APPENDIX (i)

TIME AND COST DISTRIBUTION

STAFF (Caliente Mining Corporation)

<u>Name</u>	<u>Position</u>	<u>Dates</u>	<u>Days</u>	<u>Rate</u>	<u>Total</u>
J.G. Simpson, P.Eng.	Supervisor	10-11 Apr.	2	\$150	\$ 300
G. Jilson, B.Sc.	Field Supervisor	29-30 Mar. 9-11 Apr.	5	50	250

CONTRACTOR

Donegal Developments Ltd.

(1)	Cut and picket base line, 5 miles at \$125 per line mile	625
(2)	Flag and chain 35 miles at \$80 per line mile	2,800
(3)	Magnetometer Survey, 40 miles at \$60 per line mile	2,400

DRAFTING AND DUPLICATION

C.L. Cory Ltd. 100

TRANSPORT

\*Okanagan Helicopters

Mobilization, 1 hr. 25 min. at \$250 hr.	354
Demobilization, 1 hr. 20 min. at \$250 hr.	333

TOTAL \$7,162

\*No road access to property.

Declared before me at the City  
of Vancouver in the  
Province of British Columbia, this 8  
day of June 1972.

*John Simpson*  
John Simpson  
Notary Public for the Province of British Columbia.

APPENDIX (ii)

CERTIFICATION

APPENDIX (ii)

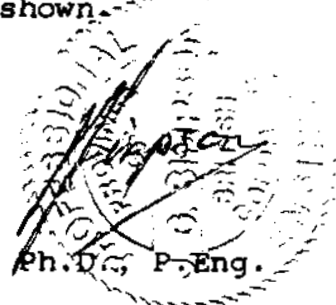
CERTIFICATION

I, John Glenn Simpson, of 720 Anderson Crescent, West Vancouver, British Columbia, do certify that

- 1) I graduated from King's College, London University with a B.Sc. (Hons) Geology in 1958, and was awarded a Ph.D. (External) from London University in 1969.
- 2) I am a Fellow of the Geological Association of Canada and a registered Professional Engineer in the Province of British Columbia and have practiced my profession in Africa, Europe and Canada for the past 14 years.
- 3) The work described in this report was carried out under my direction and supervision between the dates shown.

Dated at Vancouver, British Columbia,  
this 25th day of May, 1972.

J. G. Simpson, B.Sc., Ph.D., P.Eng.

A circular professional seal for the Province of British Columbia, featuring a signature across it. The seal contains the text "PROFESSIONAL ENGINEER" and "PROVINCE OF BRITISH COLUMBIA".