

# 4272

82E/13E

GEOPHYSICAL REPORT

of the

GROUND MAGNETOMETER SURVEY

on the

ROY MINERAL CLAIMS

WHITEROCK - KELOWNA AREA, B. C.

VERNON MINING DIVISION

Latitude: 119°50'W

Longitude: 49°50'N

N.T.S. 82E/13

on behalf of

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <u>4272</u> MAP .....
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FRENCH EXPLORATIONS LTD.

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
Roy 50 66 incl.	14066-14073 incl.	March 2, 1974
Roy 89 - 106 incl.	14142-14159 incl.	April 7, 1974
Roy 107- 112 incl.	14229-14234 incl.	April 21, 1974
Roy 119- 122 incl.	14235-14238 incl.	April 21, 1975

by

P. P. NIELSEN, B.Sc., GEOPHYSICIST

G. C. GUTRATH, B.Sc., P.Eng., GEOLOGIST

ATLED EXPLORATION MANAGEMENT LTD.

May, 1973

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## INTRODUCTION

Commencing February 20, 1973 a line cutting and ground magnetometer survey program consisting of 15 line miles was carried out on the Roy claims in the Whiterocks Mountain area about 25 miles northwest of Kelowna, B. C..

The program was executed by Atled Exploration Management Limited on behalf of French Explorations Ltd. and was concluded on March 2, 1973.

The purpose of the magnetometer survey was to extend the magnetometer coverage previously carried out to the northwest to delineate favourable host rocks for sulphide and/or titaniferous magnetite mineralization.

## LOCATION AND ACCESS

The claims are located about 25 miles NW of the city of Kelowna, B. C. and are in the Vernon Mining Division. The first 12 miles are paved and the remainder consists of gravel logging roads.



Department of  
 Mines and Petroleum Resources  
 ACTIVE LIST  
 NO. 4272 #1

LOCATION MAP

The center of the grid is roughly at the 15.5 mile post of the main Bear Creek logging haulage road just west of Bear(Lambly)Lake. Local access is good by way of local logging roads and trails.

Co-ordinates are 119°50'W Longitude and 49°50'N Latitude.

#### TOPOGRAPHY

Local relief varies from 3,500 feet A.S.L. at Lambly Lake to about 4,500 feet A.S.L. to the northwest and southeast.

The size and shape of Lambly Lake has recently been altered by a small dam at its outflow.

#### GEOLOGY

The majority of the grid area is mapped by the G.S.C. as being underlain by the Cache Creek group of Permian age overlain by or in contact with Eocene or Oligocene andesites, tuffs or shales east of Lambly Lake. Cretaceous Valhalla granites and possibly hornblendite and gneisses (unit16) are mapped about 2 miles southwest of Lambly Lake but are thought by others to intrude much of the Cache Creek rocks to the west and northwest of Lambly Lake.

Overburden is quite widespread resulting in few outcrops in the survey area.

The Valhalla granites and associated hornblendites and gneisses containing appreciable amounts of titaniferous magnetite are thought to be a favourable host rock for sulphides and or iron-titanium oxides of economic interest.

#### PREVIOUS WORK

No previous geophysical surveys have been carried out on these claims covered by this report although some reconnaissance ground magnetometer traverses were done along the claim lines.

Known reports on the property as a whole are:

1. "Report to W.A. McClelland on a Visit to the Roy Claims at Lambly Lake" by S. F. Kelly.  
(September 1, 1970)
2. "Appraisal Report for Coseka Resources & Wharf Resources" by Cannon-Hicks Associates Ltd.  
(January 18, 1973)
3. "Geological Report on Certain Mining Claims Kelowna, B.C." by: F. L. Croteau.  
(October 3, 1966)
4. "Report on a Gravity - Magnetic Profile for Cariboo Gold Quartz Mining Co." by Kenting earth Sciences.  
(December 11, 1970)

LINE CUTTING

(Grid Installation)

A Grid totalling 79,000 feet (approximately 15 miles) including a 5,600 foot baseline was installed using "Topofil" chain method, blazing and flagging. Cross lines were spaced 400 feet apart using a station interval of 100 feet.

The baseline was cut on a bearing of N20E° along the west shore of Lambly Lake.

CLAIMS

The grid and survey area covered approximately 20 of the following mineral claims presently owned by French Explorations Ltd.

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
Roy 59 - 66 incl.	14066-14073 incl.	March 2, 1974
Roy 89 - 106 incl.	14142-14159 incl.	April 7, 1974
Roy 107 - 112 incl.	14229-14234 incl.	April 21, 1974
Roy 119 - 122 incl.	14235-14238 incl.	April 21, 1975

The A1, A2 and A Fraction claims were staked during the survey but no assessment work was filed on these claims.

THE GROUND MAGNETOMETER SURVEY

A. Comment

A total of 15 line miles (including the baseline) was magnetically surveyed over lines spaced 400 feet apart using a station interval of 100 feet.

B. Method

The instrument used was a vertical force fluxgate magnetometer which is hand held and levelled using a bubble-level on the face of the instrument.

The magnetometer was held by the aid of a harness to maintain constant height above ground and constant distance from the operator. Readings were taken facing one direction using the most sensitive scale possible.

Loop times of less than 1.5 hours were encountered, resulting in good control of the diurnal corrections. A nearby base-station was read at the beginning and end of each day for the day-to-day correlation and to monitor any possible magnetic storms. Additional control was obtained from the baseline readings.

C. Instrumentation

A Scintrex MF-1 Model Fluxgate magnetometer was used. This unit measures the vertical force variations of the earth's magnetic field, displayed in gammas, on a meter having five ranges for a total of  $\pm 100,000$  gammas. The MF-1 is very light, is fully portable, has excellent temperature stability, has negligible orientation error and is of rugged construction.



D. Data Compilation and Presentation

The readings and time of readings were recorded in a metal-free field book and transferred to a planimetric map for contouring after the necessary diurnal and day-to-day corrections were made.

The scale of the values-contour map is 400 feet. A 250 gamma contour interval has been used. Areas of high susceptibility (i.e. above 750 gammas) are stipled and lows less than 0 gammas are "ticked".

E. Discussion of Results

The values - contour map indicates a range of relative magnetic susceptibility from -315 gammas at Line 12N; Stn. 29E to +1100 gammas at Line 8N Stns. 9E and 11E for a total magnetic relief of 1,415 gammas.

Generally the contour map exhibits a north-south elongated texture thought to be primarily due to the flow direction of the volcanic rocks mapped by the G.S.C.

The area covered by the 250 gamma and below contour at the eastern ends of the grid are thought to be representative of G.S.C. unit 19 likely tuff and/or shale.

The remainder of the grid area is thought to be underlain by Unit #5, Cache Creek group volcanics primarily greenstones.

No granitic rocks are readily apparent from the magnetometer survey although the highest readings (750 to 1,100 gammas) could be due to either magnetic hornblendite, gneiss or erosional remnants

of tertiary basalt flows observed at outcroppings on Lambly (Bear) Creek about two miles below Lambly Lake.

The general geological texture from the magnetics is a north-south striking volcanic flow.

A fault and/or contact probably occurs through Lambly Lake along Line 16S east of the baseline.

#### CONCLUSIONS AND RECOMMENDATIONS

Most of the survey area is magnetically uninteresting and appears to be underlain by unfavourable rock types not related to the magnetite bearing granites and hornblendites observed elsewhere in the area.

A possible exception might be the moderate magnetic high situated on the north half of Lambly Lake east of the baseline.

No further geophysical work is advised at this time. The above mentioned magnetic high should be checked by a brief geological examination at which time a few geochemical soil and silt samples should be collected around the northern shore of Lambly Lake to test for possible copper and molybdenum mineralization.

Respectfully submitted,

ATLED EXPLORATION MANAGEMENT LTD.



P. P. Nielsen, B.Sc. Geophysicist



G. C. Gutra, P. Eng. Geologist

APPENDICES

STATEMENT OF AUTHOR'S QUALIFICATIONS

I DO HEREBY STATE THAT:

1. I am the author of this report.
2. I have been actively and responsibly involved in mining exploration using airborne, ground and computer applied geophysics in Western Canada and the United States for the past nine years.
3. I graduated with a B.Sc., degree in Geophysics from the University of British Columbia in 1969.
4. I am presently Manager, Geophysical Division, Atled Exploration Management Ltd., at #420 - 475 Howe Street, Vancouver, B. C.
5. I am a member of the Society of Exploration Geophysicists, the Canadian Institute of Mining and Metallurgy and the B. C. Geophysical Society.

Signed

P. P. Nielsen

P. P. Nielsen

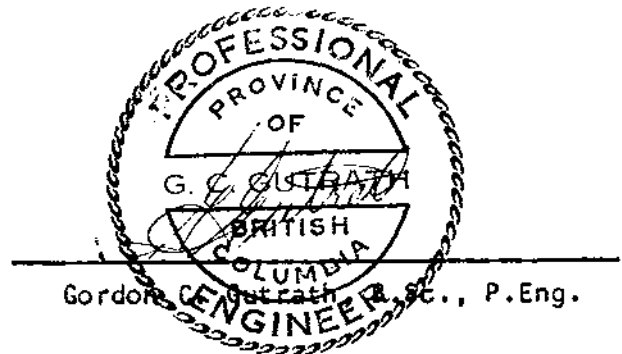
Date

May 4, 1973

ENGINEER'S CERTIFICATE

I, GORDON C. GUTRATH, of 3636 Lakedale Avenue, in the Municipality of Burnaby, in the Province of British Columbia, DO HEREBY CERTIFY:-

1. That I am a consulting geologist with a business address of #420-475 Howe Street, Vancouver 1, B. C.
2. That I am a graduate of the University of British Columbia where I obtained my B.Sc. in geological science in 1960.
3. That I am a Registered Professional Engineer in the Geological Section of the Association of Professional Engineers in the Province of British Columbia.
4. That I have practised my profession as a geologist for the past twelve years, and
5. That I have no interest in the property with which this report is concerned, nor do I expect to receive any such interest. I have no interest in the securities of French Explorations Ltd.



DATED at the City of Vancouver, Province of British Columbia, this 4<sup>th</sup> day of May, 1973.

PERSONNEL

P. P. Nielsen - Supervisor and Geophysicist

P. Henry - Party Chief and Magnetometer Operator

R. Klanjscek ) - Linecutters

T. Hutchinson)

COSTS

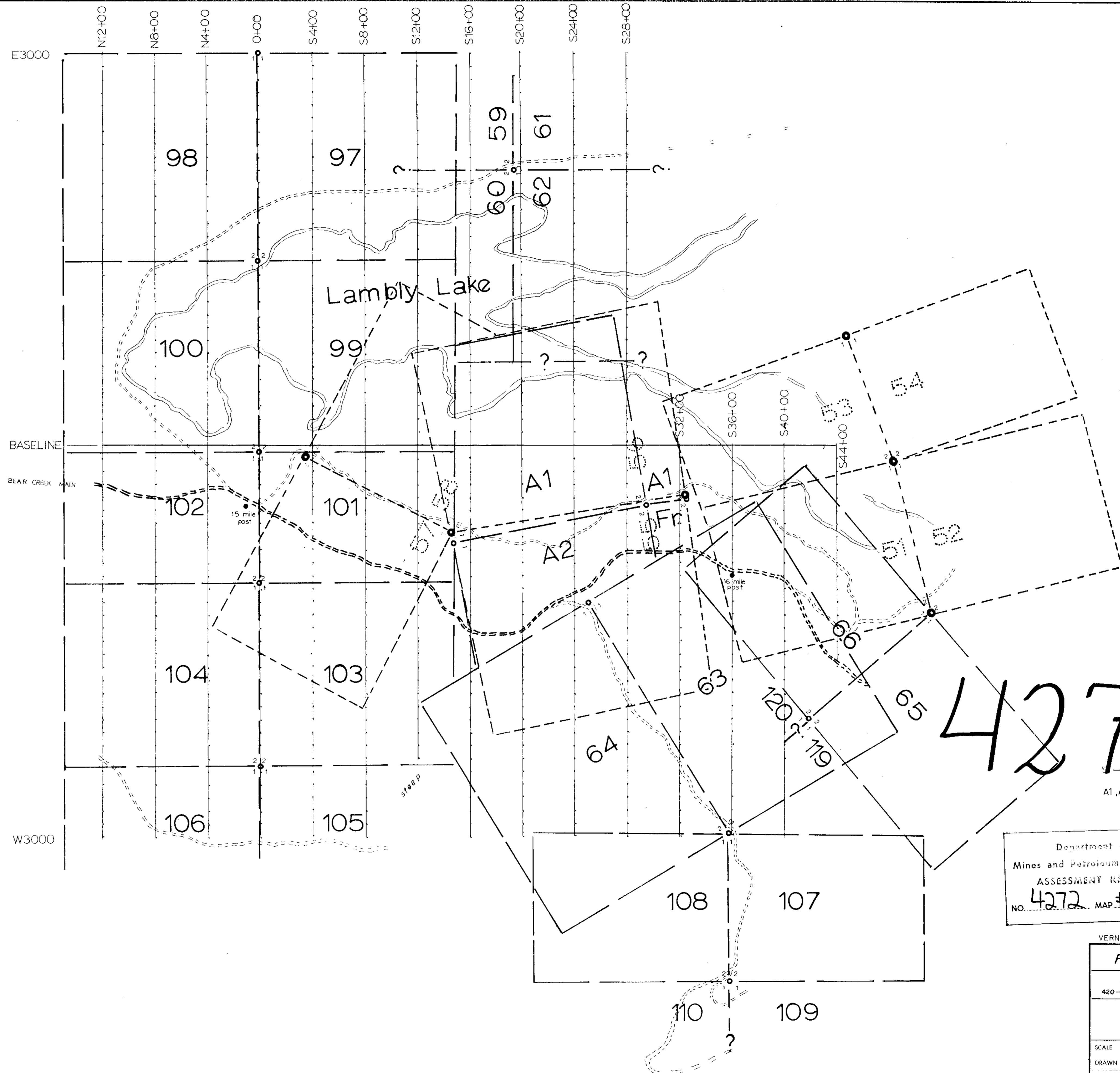
1. Magnetometer Survey

(a) 14.96 miles @ \$141.70/mile.....	\$ 2,120.00
(includes salaries, instrument rental, food and accommodation, report, mob- demob.)	
(b) Local Transportation (pro-rated with linecutting)	
6 days @ \$25.00/day.....	150.00

2. Linecutting

(a) 14.96 miles @ \$110.30.....	1,650.00
(includes salaries, materials, food and accommodation, mob-demob.)	
(b) Local transportation (pro-rated with magnetometer survey)	
6 days @ \$25.00/day.....	150.00
	<hr/>
	\$ 4,070.00
	<hr/> <hr/>

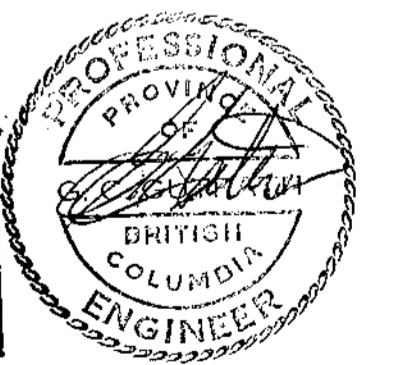




4272 M-2

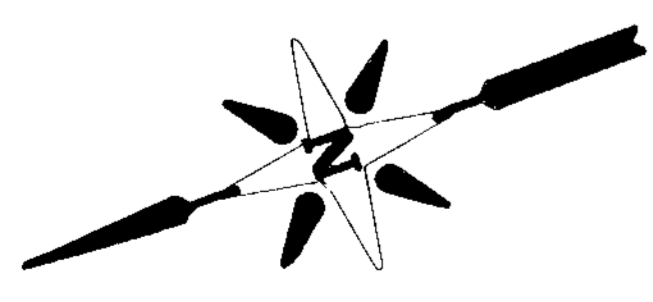
98-110 incl. cancelled Claims  
 A1, A2, A1 Fr. Newly Staked Claims

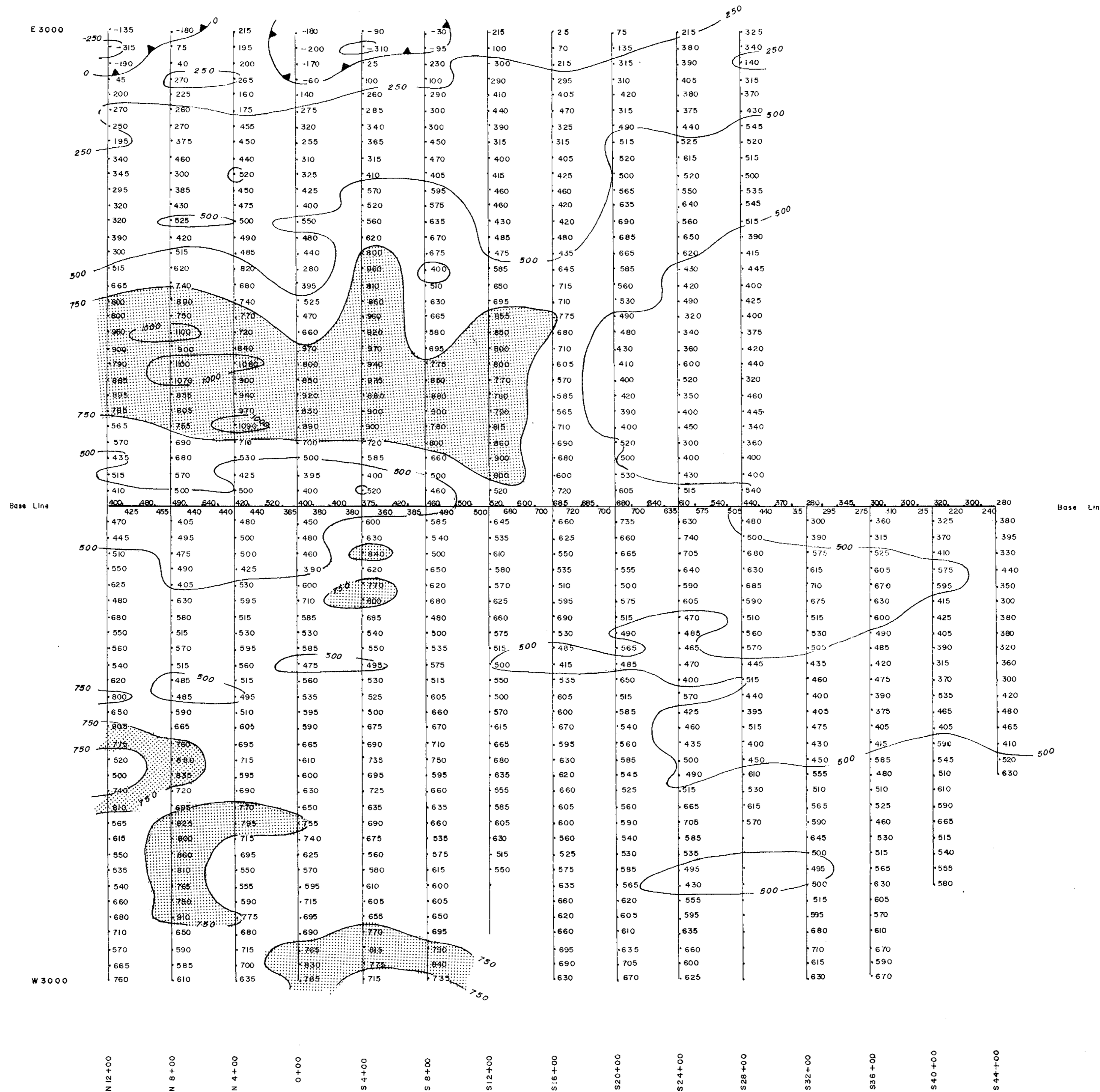
Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 4272 MAP #2



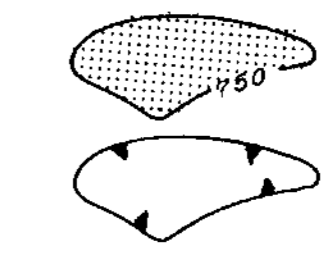
VERNON, M.D. N.T.S. 82E/3E  
 821/4E

FRENCH EXPLORATIONS LTD.	
Atled Exploration Management Ltd. 420-475 HOWE ST. VANCOUVER 1, B.C.	
ROY CLAIMS	
SCALE 1" = 400'	CLAIM LOCATION
DRAWN J.P.H.	8
DATE MARCH, 1973	LINE CUTTING GRID
NUMBER	





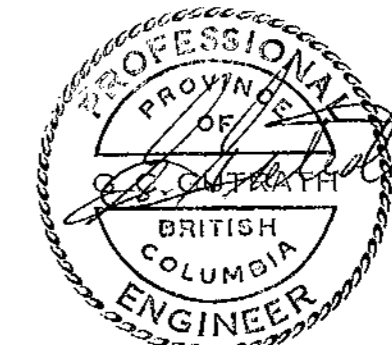
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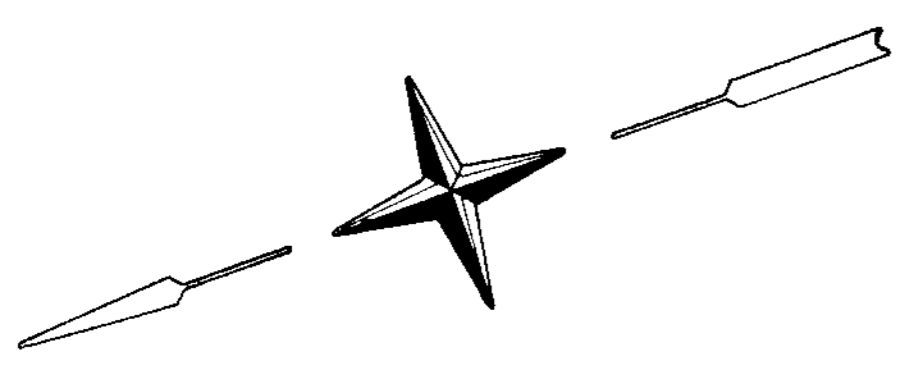
RELATIVE MAGNETIC HIGH

RELATIVE MAGNETIC LOW

CONTOUR INTERVAL - 250 GAMMAS



TO ACCOMPANY REPORT BY:-  
 P.P. NIELSEN B.Sc. GEOPHYSICIST  
 G.C. GUTRATH B.Sc. P.Eng. GEOLOGIST  
 ATLED EXPLORATION MANAGEMENT Ltd.  
 Vancouver, B.C. APRIL, 1973



Department of Mines and Petroleum Resources <b>ASSESSMENT REPORT</b> NO. 4272 MAP #3	<b>FRENCH EXPLORATIONS LTD.</b> Allied Exploration Management Ltd. 420-475 Howe St. Vancouver 1, B.C.	
	<b>ROY CLAIMS</b> VERNON, M.D. N.T.S. 82 E/13	
INSTRUMENT USED - SHARPE M.F. 1 FLUXGATE MAGNETOMETER	SCALE 1" = 400' DRAWN j.p.h. DATE March, 1973 NUMBER	<b>MAGNETOMETER SURVEY</b>