

2167

GEOCHEMICAL REPORT

on Work Done between August 10 and November 19, 1969

on

Anne 23-32, 35-40

Mineral Claims

owned by Hibernia Mining Co., Ltd.,

Chemainus River

four miles north

of Youbou, V.I.

48°124° NE

by

J.H. Montgomery, Ph.D., P.Eng.

46.74  
+ 2.28  
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51.02

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GEOCHEMICAL REPORT  
ON ANNE 23-32, 35-40  
VICTORIA MINING DIVISION

INTRODUCTION

A geochemical soil survey was conducted over the Anne 23-32 and 35-40 mineral claims by Mr. A.W. Lake and a field crew under the supervision of the writer. The survey was made during the period August 20 to September 9, 1969.

LOCATION

The Anne 23-32 and 35-40 mineral claims are located on the south side of the headwaters of Chemainus River about four miles north of Youbou, B.C. on Vancouver Island. See Figure 1. (N.T.S. Ref. 92C/16E; Lat.  $48^{\circ}55'$ , Long.  $124^{\circ}11'$ ).

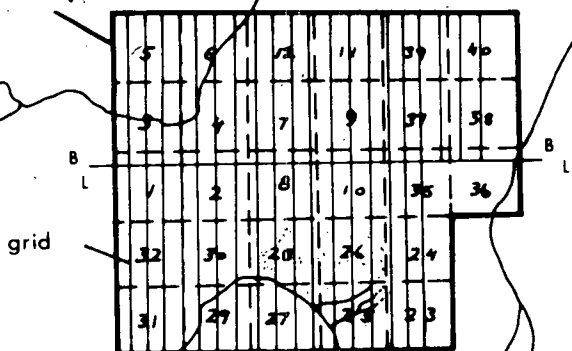
CLAIMS AND OWNERSHIP

The Anne claims are owned by Hibernia Mining Co., Ltd. of Vancouver, B.C. For purposes of applying assessment work, the 16 claims have been grouped as the Anne Two Group. A description of the claims is given in the following table:



"Anne"  
Group

Chemainus R.



Widow Cr.

2167 #1

Figure: 1

# Location Map

TO ACCOMPANY GEOCHEMICAL  
REPORT BY J.H. MONTGOMERY, P.ENG.,  
ON ANNE GP., CHEMAINUS RIVER,  
VICTORIA M.D., DATED NOV. 6, 1969.

Scale: 1.25" = 1 mile

YOUBOU

Cowichan

Lake

<u>CLAIM</u>	<u>RECORD NO.</u>	<u>EXPIRY DATE</u>
ANNE 23-32	14646-55	Nov. 19, 1969
ANNE 35-40	14656-61	Nov. 19, 1969

STATEMENT OF WORK

The geochemical survey was conducted in 32 man-days during the period August 20 to September 9, 1969. The property was visited by the writer on May 20 in order to determine a suitable method of sampling and again during the period October 23 to October 30, 1969. A breakdown of the work and expenditures is given below.

<u>WORK</u>	<u>DATE</u>	<u>MAN-DAYS</u>	<u>COST</u>
Soil Sampling	Aug.20 - Sept.9	32 (\$25.00/day)	\$800.00

Expenditures

1. Truck Rental	314.00	
2. Board Loss (32 man-days)	320.00	
3. Soil Analyses (292 @ \$2.00)	584.00	
4. Eng. & Supervision	<u>504.00</u>	
	\$1,722.00	<u>1,722.00</u>
	TOTAL	\$2,522.00

PERSONNEL

1. A.W. Lake (Hibernia Mining)  
1101 - 207 W. Hastings St.,  
Vancouver, B.C.
2. J. Sabe, Vancouver, B.C.
3. S. North, Ladysmith, B.C.
4. J. Holman, Chemainus, B.C.
5. J.H. Montgomery, P.Eng.  
805 - 850 W. Hastings St.,  
Vancouver, B.C.

GEOCHEMICAL SURVEY

A control grid was established consisting of an EW baseline 6000 feet long and NS lines at intervals of 400 feet along the base line. Approximately 58,000 feet of line was sampled at 200 foot intervals making a total of 292 samples.

The overburden on the claim area consists of glacial till of shallow to moderate depths (2 - 20 feet). In most places, a partly developed B horizon was encountered at depths of less than 12 inches. Samples from the B horizon were obtained with a shovel and placed in Kraft envelopes for shipment to the laboratory.

The samples were analyzed for copper and molybdenum by Bondar-Clegg and Co. of North Vancouver, B.C. The samples

were dried and sieved to obtain a -80 mesh fraction for analysis. Weighed portions of the -80 mesh material were subjected to hot HNO<sub>3</sub>-HCl treatment to extract the metals which were subsequently determined by atomic absorption.

The results of the analyses and locations of the samples are shown in Figure 2 and 3.

RESULTS

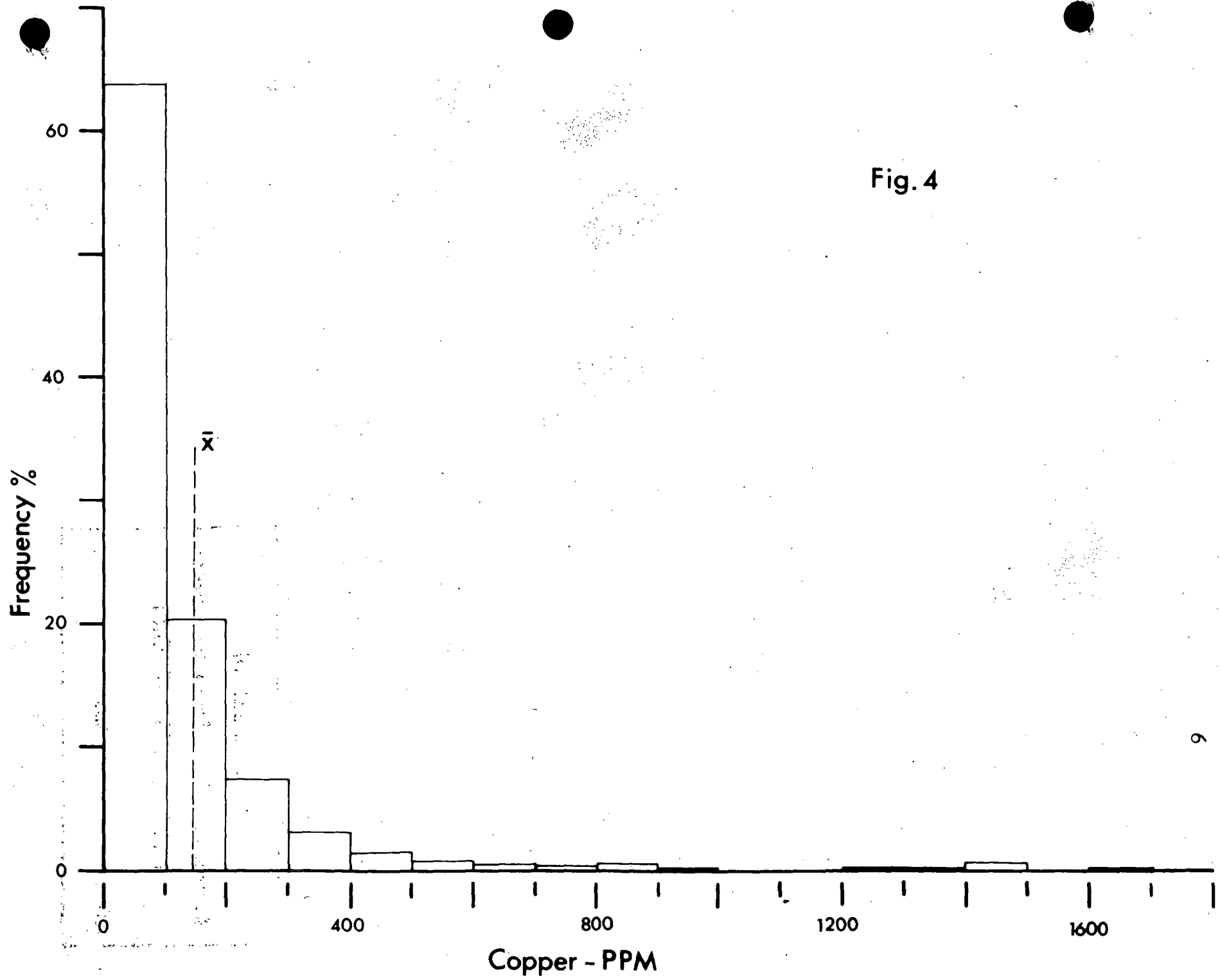
Frequency distributions and cumulative percent distributions were plotted for copper and molybdenum. Figures 4 and 5 show frequency distribution curves for copper and molybdenum respectively. Both curves are positively skewed and appear to have log normal distributions. Calculated means are 140 ppm copper and 11 ppm molybdenum.

The data was also plotted on cumulative percent/ log abscissa paper. See Figures 4a and 5a.

Inspection of the cumulative percent curves suggested threshold values of 300 ppm Cu and 40 ppm Mo, mixed values of 300-500 ppm Cu and 40-100 ppm Mo and anomalous values of 500 ppm Cu and 100 ppm Mo.

The use of these intervals in Figures 2 and 3 shows the presence of several anomalous areas which are

Fig. 4

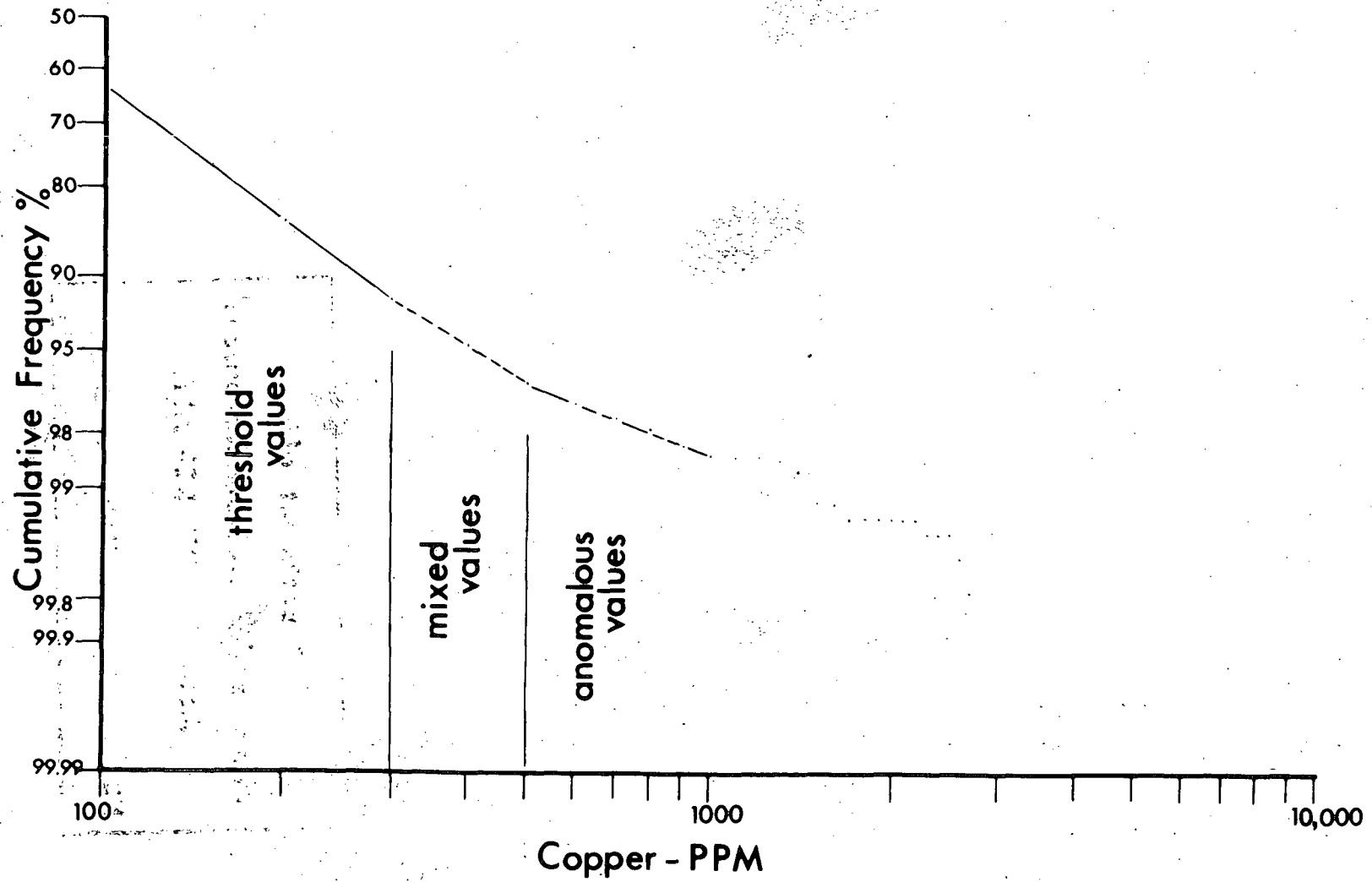




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NO. 2167 MAP.....

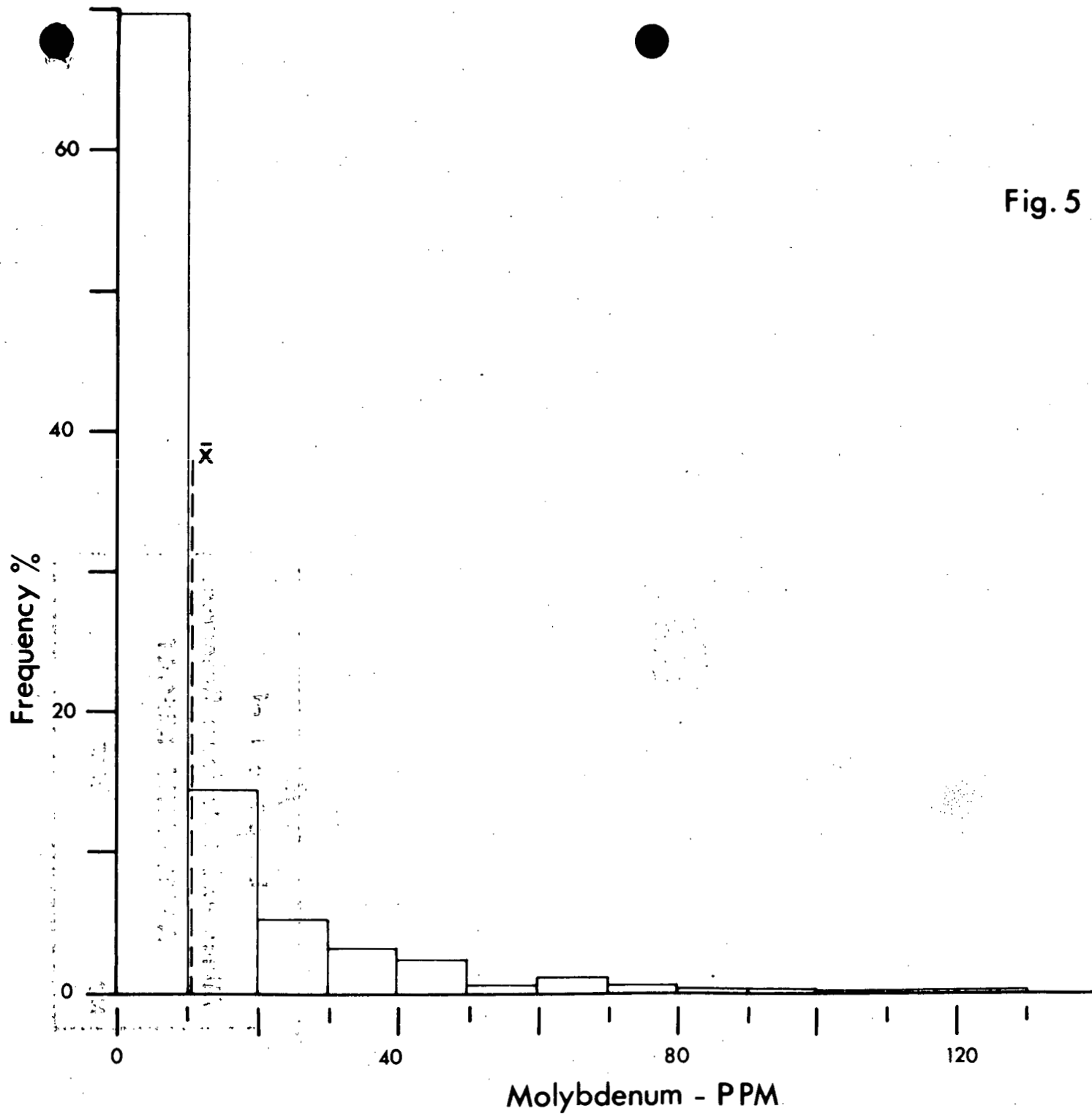
Fig. 4a



**Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT**

NO. 2167 MAP.....

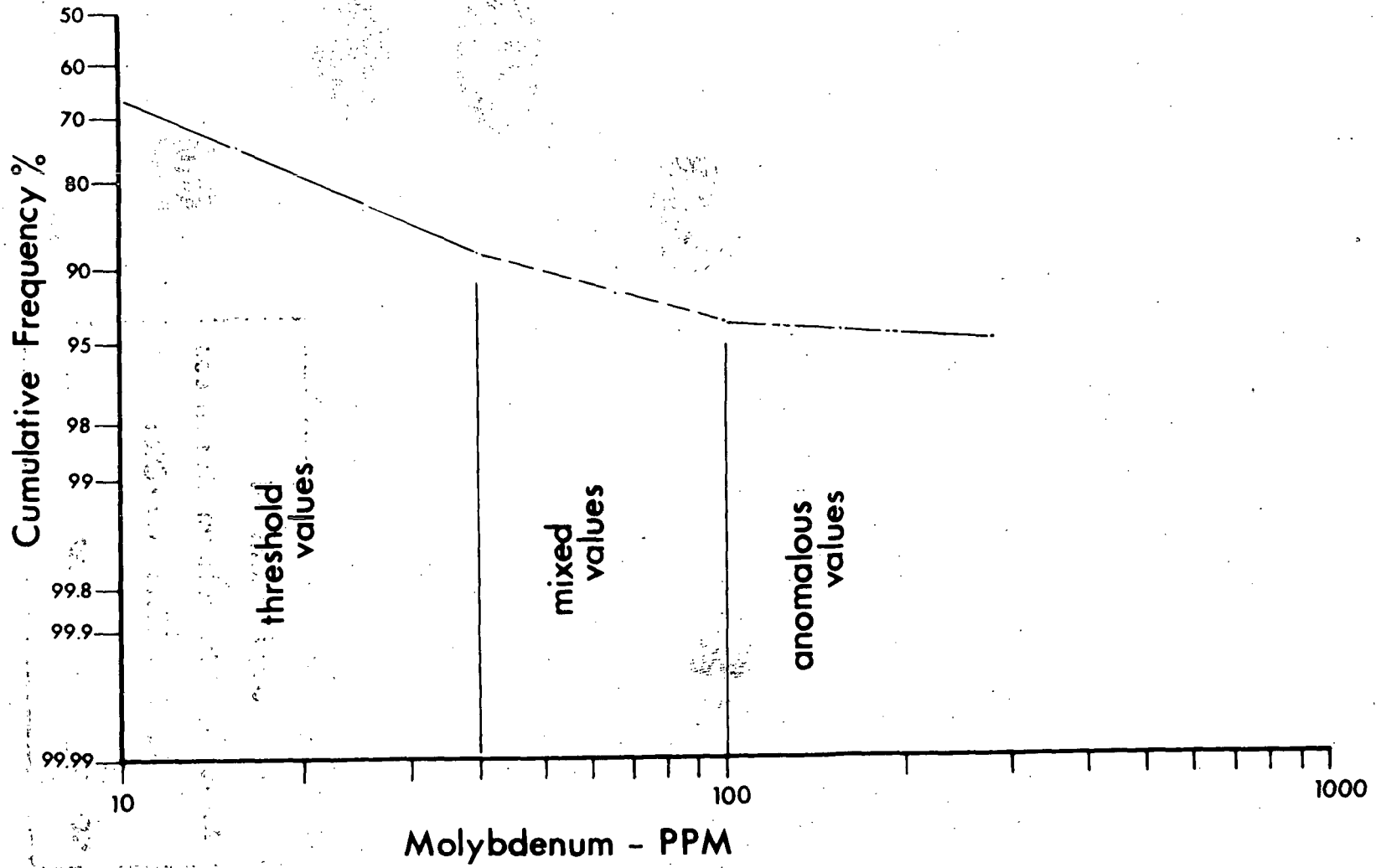
Fig. 5



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NO. 2167 MAP \_\_\_\_\_

Fig. 5a



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NO. 2167 MAP \_\_\_\_\_

located mainly within a zone bounded by 8S to 16N on lines 4E to 28E. A number of other small anomalies are scattered erratically about the survey area.

Respectfully submitted,

  
J. H. Montgomery, Ph.D., P. Eng.

November 6, 1969.  
Vancouver, B.C.



CERTIFICATE

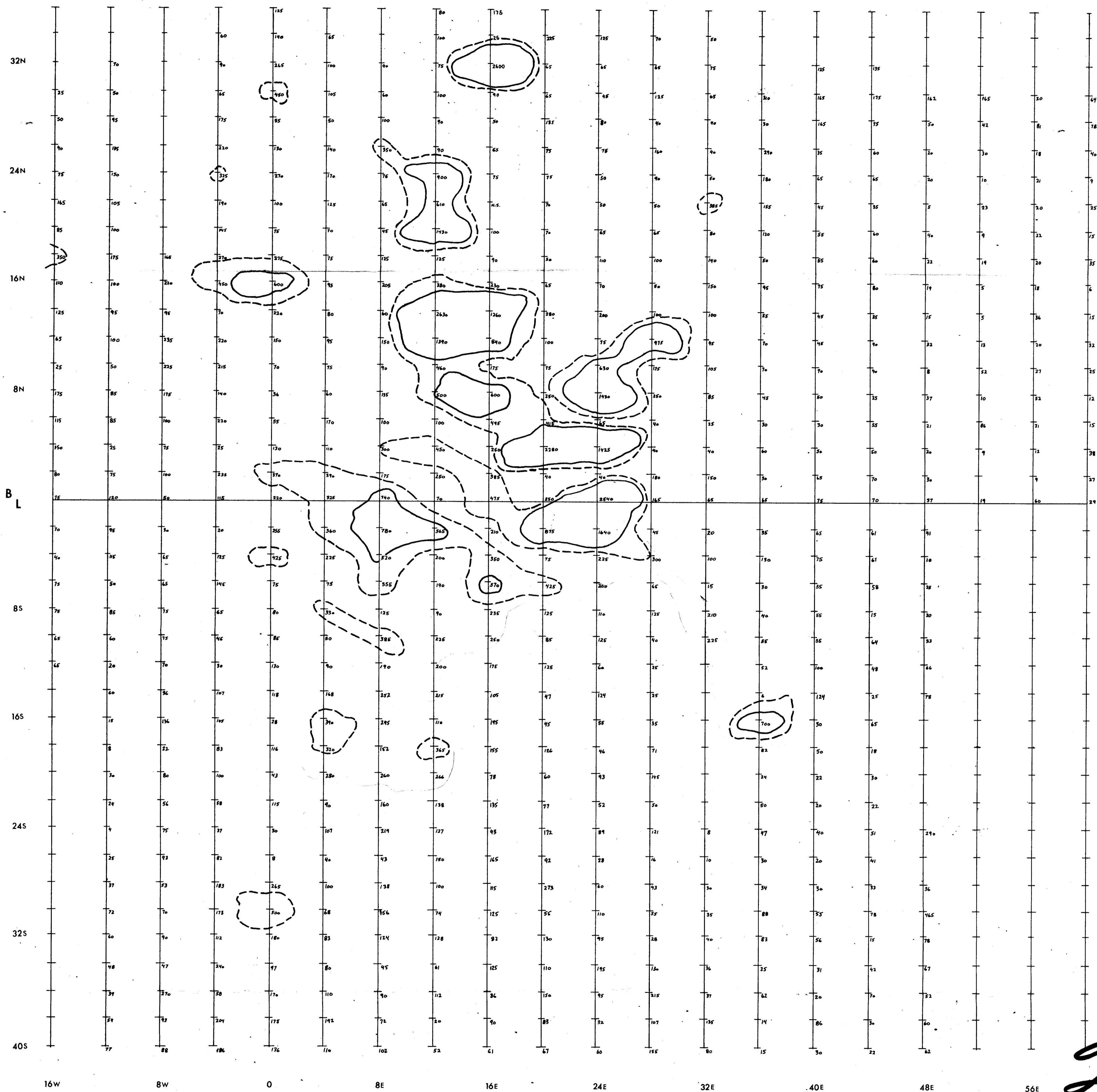
I, J.H. Montgomery, of Vancouver, British Columbia,  
hereby certify that:



1. I am a geological engineer and reside at 4153 West 11th Ave., Vancouver 8, B.C.
2. I am a graduate of the University of British Columbia: B.Sc. in 1959, M.Sc. in 1960, Ph.D. in 1967.
3. I have practiced my profession since 1959.
4. I am a member of the Association of Professional Engineers of British Columbia.
5. I have no interest direct or indirect in the properties or securities of Hibernia Mining Co., Ltd., or their affiliates, nor do I expect to receive any such interest.

DATED at Vancouver, B.C., this 6th day of November, 1969.

  
\_\_\_\_\_  
J.H. Montgomery, Ph.D., P.Eng.

4153 West 11th Ave.,  
Vancouver, B.C.

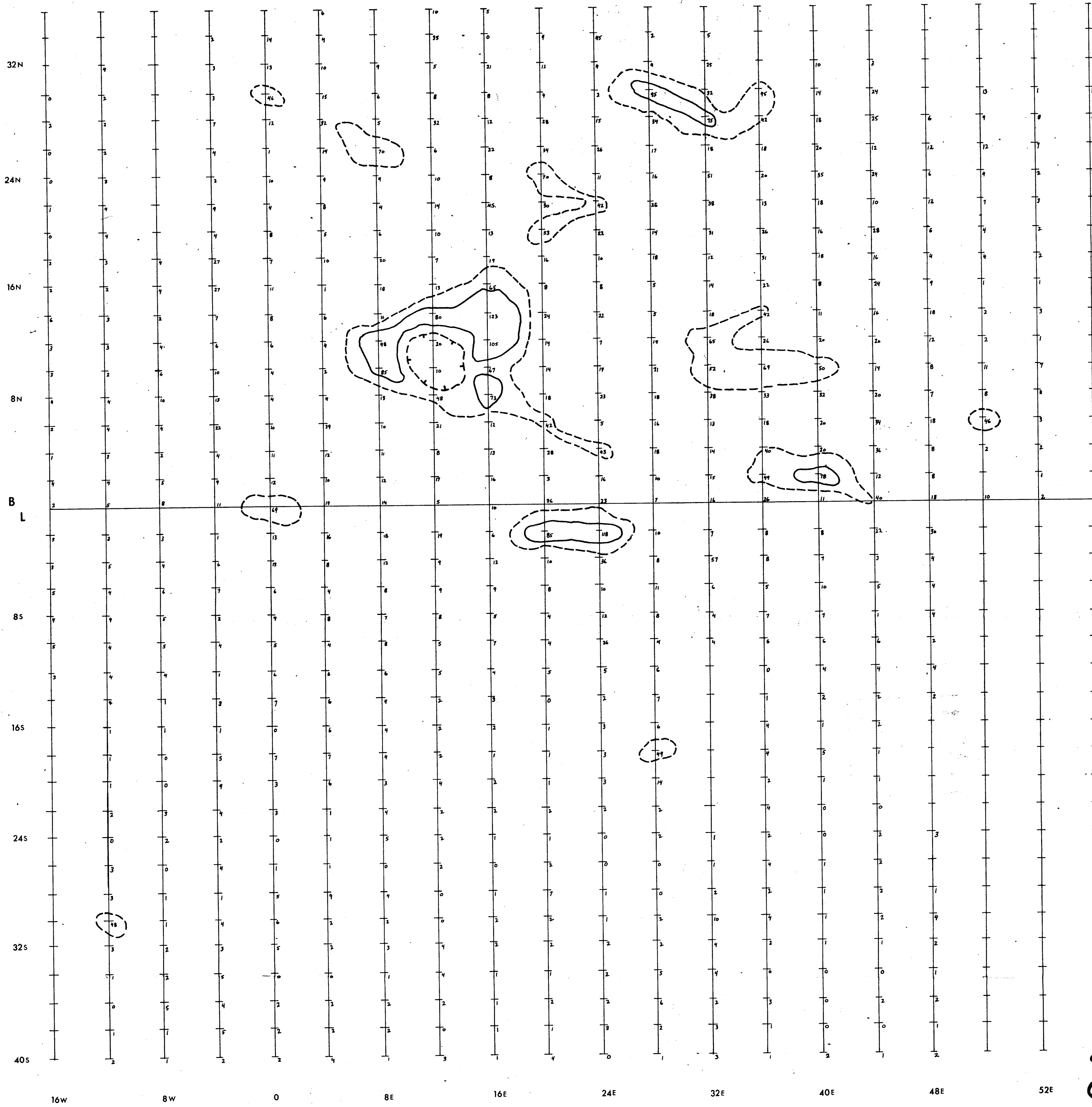


**Contours**  
 500 PPM :   
 300 PPM : 

**2167**  
*J.H. Montgomery*

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 NO. 2167 MAP #2

**FIGURE: 2**  
**Geochemical Plan:Cu**  
 TO ACCOMPANY GEOCHEMICAL REPORT BY  
 J.H. MONTGOMERY, P. ENG., ON ANNE GROUP,  
 CHEMAINUS RIVER, VICTORIA M.D., DATED NOV. 6, 1962  
 SCALE: 1" = 400'



**Contours**

- 70 PPM:
- 40 PPM:

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NO. 2167 MAP #3

FIGURE: 3  
**Geochemical Plan: Mo**

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TO ACCOMPANY GEOCHEMICAL REPORT BY  
J. H. MONTGOMERY, RENG., ON ANNE GROUP,  
CHEMAINUS RIVER, VICTORIA B.C., DATED NOV. 6, 1969.

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SCALE: 1" = 400'