

1949

GEOCHEMICAL REPORT

on Work Done between May 20 and August 1, 1969

on

The Anne 1-12

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.

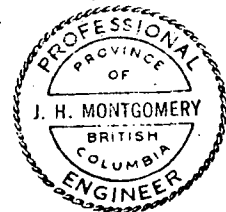
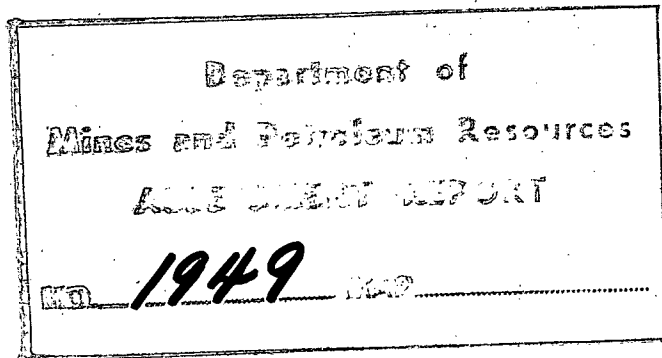


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GEOCHEMICAL REPORT
ON ANNE 1-12 MINERAL CLAIMS
VICTORIA MINING DIVISION

INTRODUCTION

A geochemical soil survey was conducted over the Anne 1-12 mineral claims by Mr. A. W. Lake and Mr. S. S. Fegan under the supervision of the writer. The survey was made during the period May 20 to August 1, 1969.

LOCATION

The Anne 1-12 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. 92 C/16E; Lat. 48°55', Long. 124°11'.

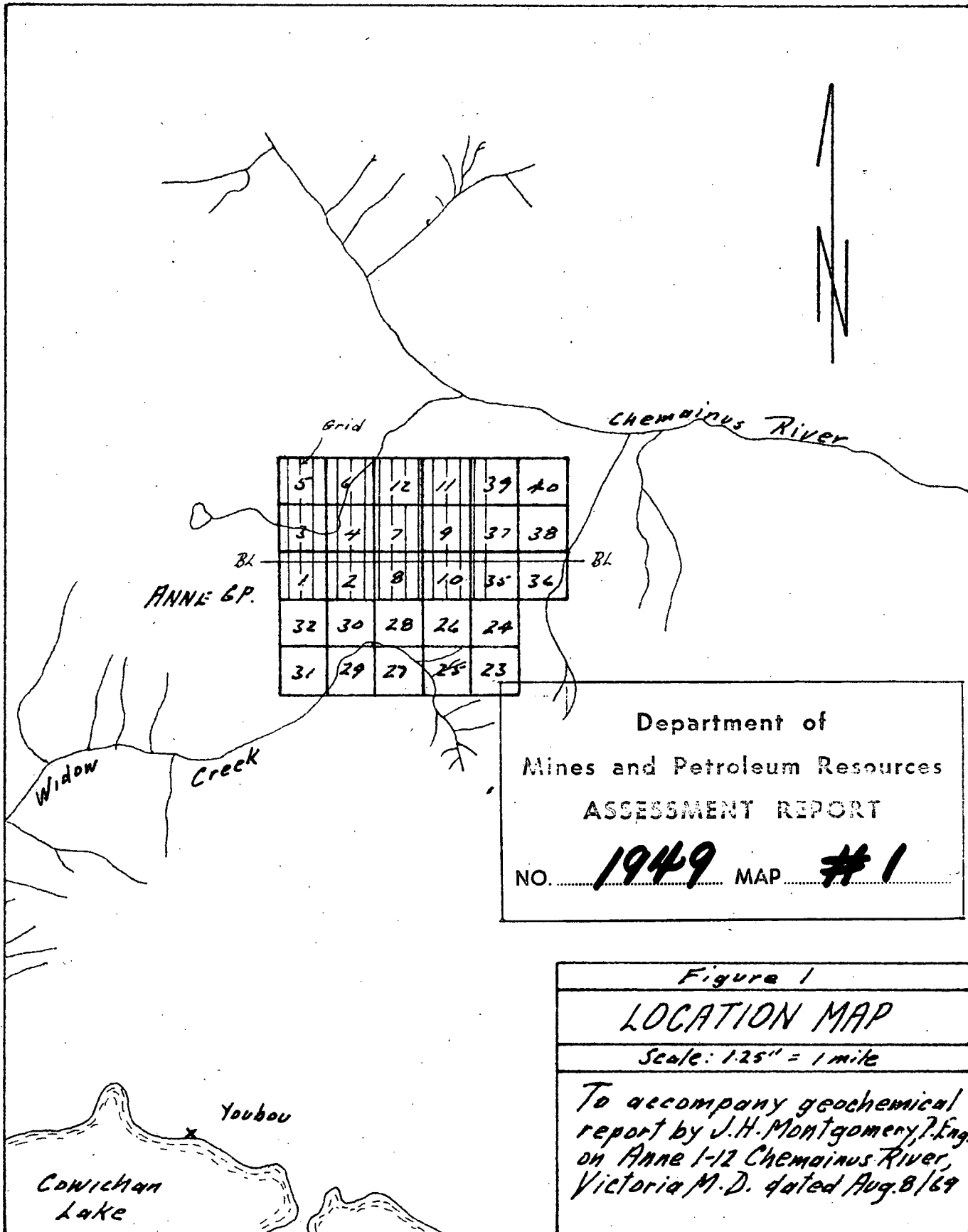
CLAIMS AND OWNERSHIP

The claims are owned by Hibernia Mining Co., Ltd. of Vancouver, B.C. A description of the claims is given in the following table.

<u>Claim</u>	<u>Record No.</u>	<u>Expiry Date</u>
Anne 1-10	14574 - 83	Aug. 9, 1969
Anne 11-12	14644 - 45	Aug. 19, 1969

STATEMENT OF WORK

The geochemical survey was conducted in 17 days during the period June 25 to July 11, 1969. The property was visited by the writer on May 20 in order to determine a suitable method of sampling. A breakdown of the work and



STATEMENT OF WORK (cont.)

expenditures is given below.

<u>Work</u>	<u>Dates</u>	<u>Man-Days (x2)</u>	<u>Cost</u>
Surveying and Soil Sampling	June 25 - July 11	17 x 2 = 34 (\$25.00/day)	\$850.00

Expenditures

1. Truck Rental	250.71	
2. Board Loss (2 men - 17 days)	340.00	
3. Soil Analyses (363 x 2.00)	726.00	
4. Eng. and Supervision	<u>504.00</u>	
	\$1820.71	<u>1820.71</u>
TOTAL		\$2670.71

PERSONNEL

- | | |
|---|---|
| 1. A. W. Lake, (Hibernia Mining)
1135 W. 12th Ave.,
Vancouver, B.C. | 3. J. H. Montgomery, P.Eng.,
805-850 W. Hastings St.,
Vancouver, B.C. |
| 2. S. S. Fegan, (Hibernia Mining)
1101 - 207 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 400 feet intervals along the base lines. Approximately 72,000 feet of line was sampled at 200 feet intervals making a total of 363 samples.

Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *5th*
day of *September, 1969*, A.D.

J. H. Montgomery

J. Paul Sub-Mining Recorder

A Commissioner for taking Affidavits within British
A Notary Public in and for the Province of British Columbia



GEOCHEMICAL SURVEY (cont.)

The overburden on the claim area consists of glacial till of shallow to moderate depths (2-20 ft.). In most places, a partly developed B horizon was encountered at depths of less than 12 inches.

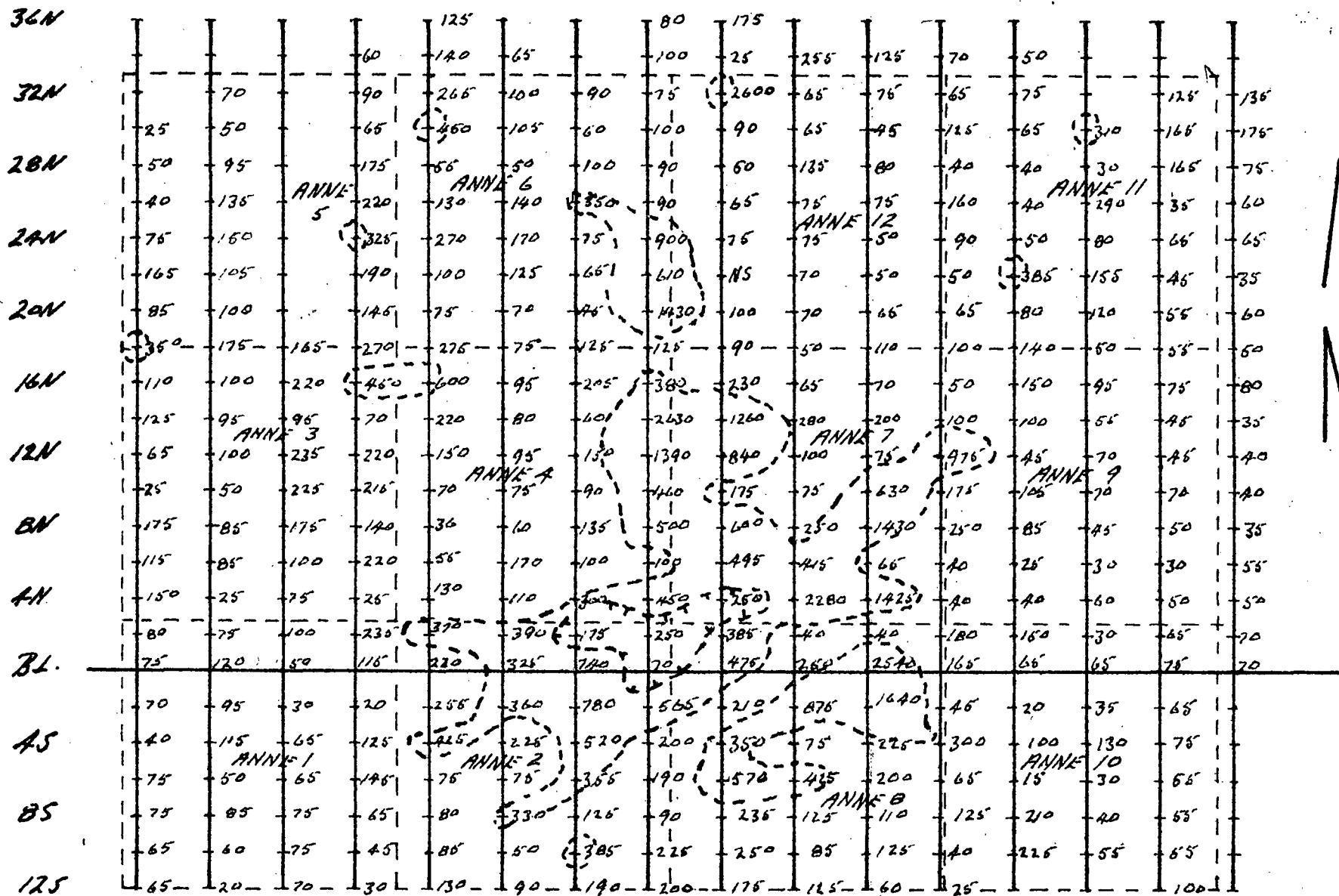
Samples from the B horizon were obtained with a shovel and placed in Kraft envelopes for shipment to the laboratory.

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_3 -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 Figures 2 and 3.

RESULTS

Frequency distributions for copper and molybdenum were plotted on normal graph paper and are shown in Figures 4 and 5. Both curves are positively skewed and appear to have a log normal distribution. The mean of 363 copper analyses is 194 ppm Cu and that of the molybdenum analyses is 16 ppm Mo.



16W 12W 8W 4W 0 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E 44E

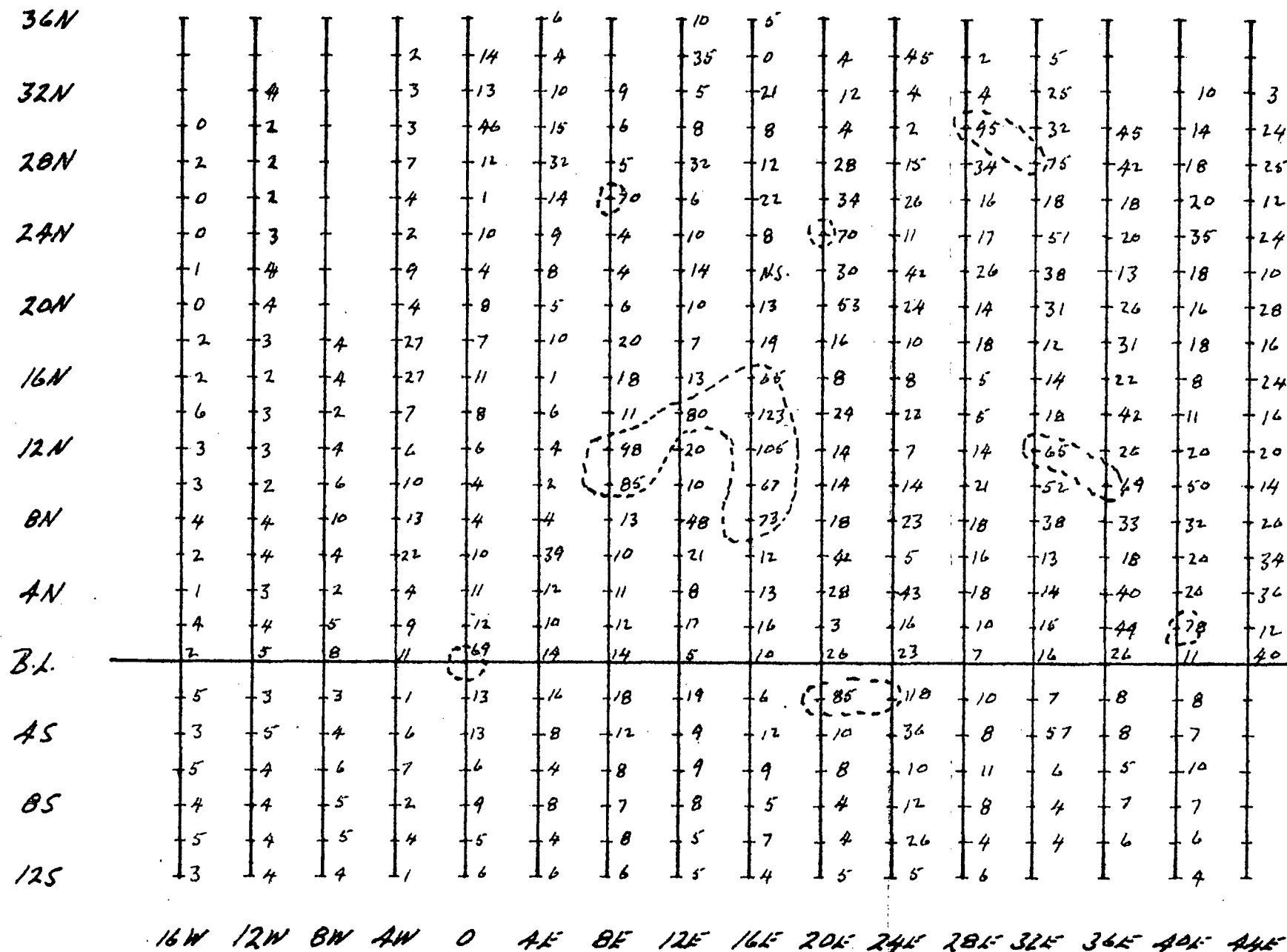
--- > 300 ppm Cu

Figure 2

GEOCHEMICAL PLAN-Cu

SCALE: 1 IN. = 800 FT.

To accompany geochemical report by J.H. Montgomery, P.Eng. on Anne 1-12, Chemainus River Victoria B.C. dated Aug. 8/69.



----- 760ppm Mo

Figure 3
GEOCHEMICAL PLAN - Mo
 SCALE: 1 IN. = 800 FT.
 To accompany geochemical report by J.H. Montgomery, P. Eng. on Anne 1-12, Chemainus River, Victoria B.C. dated Aug. 8/69

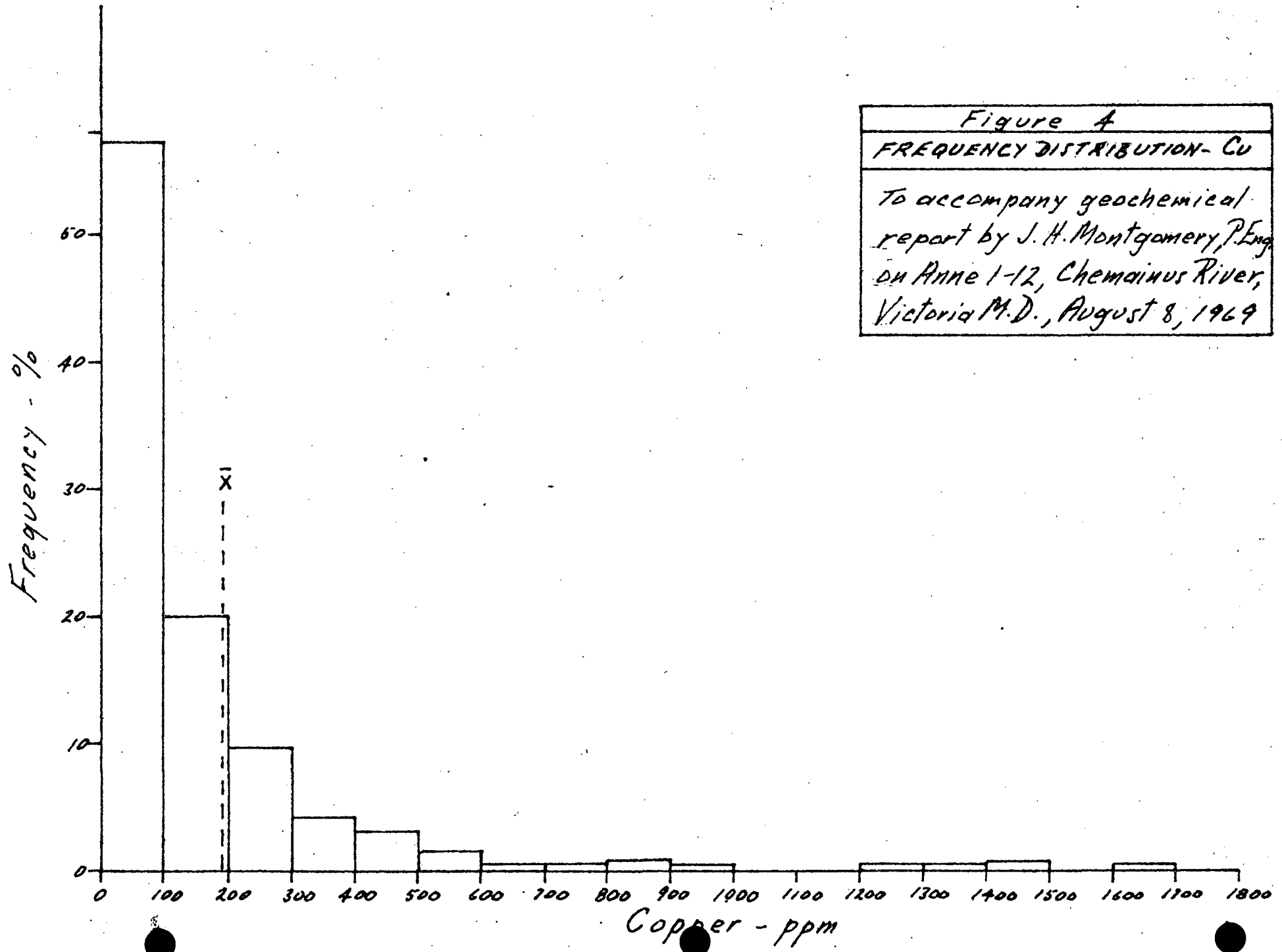


Figure 4
FREQUENCY DISTRIBUTION - Cu
To accompany geochemical
report by J. H. Montgomery, P. Eng.
on Anne 1-12, Chemainus River,
Victoria B.C., August 8, 1969

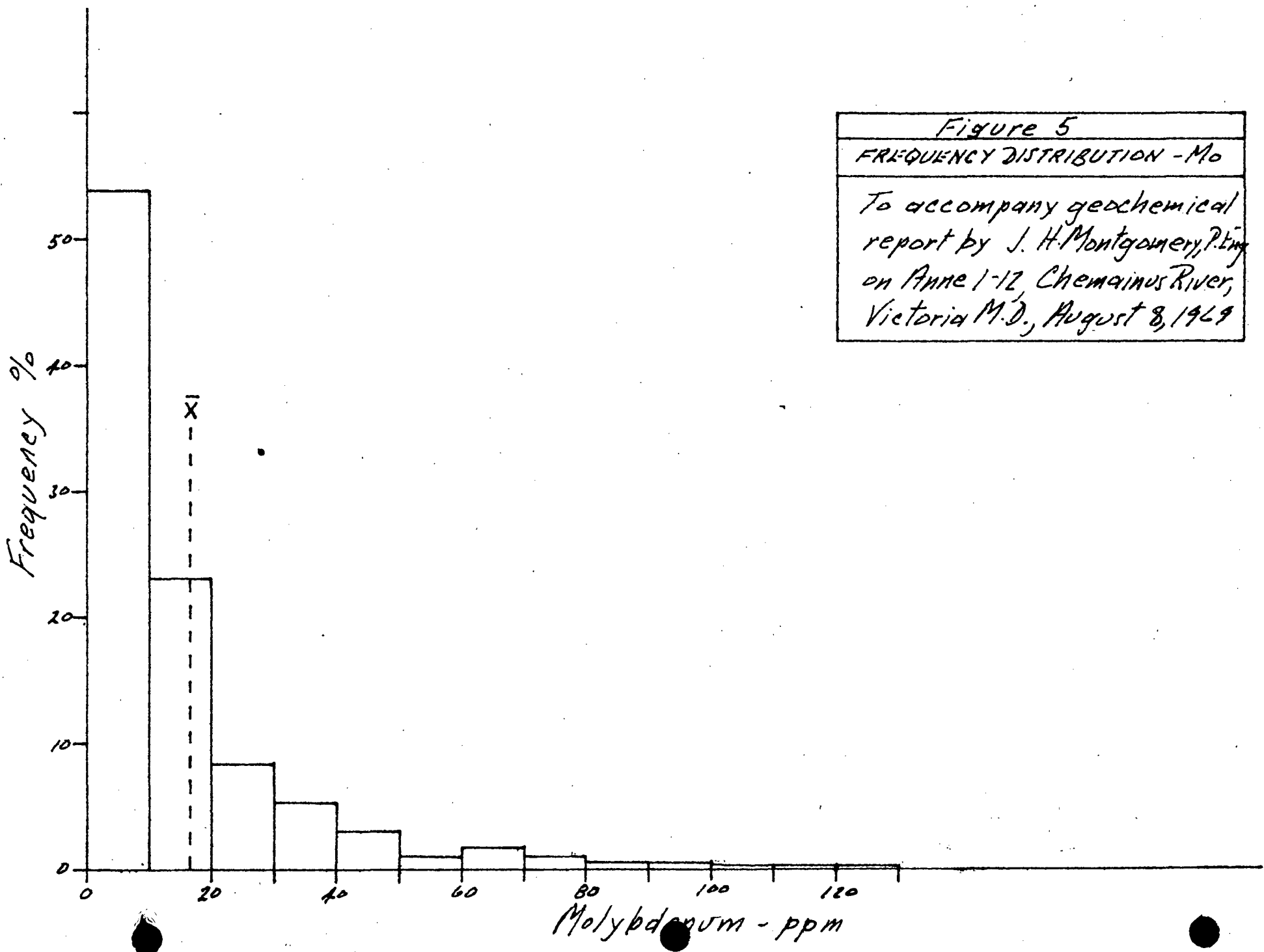


Figure 5
FREQUENCY DISTRIBUTION - Mo
To accompany geochemical
report by J. H. Montgomery, P. Eng.
on Anne 1-12, Chemainus River,
Victoria B.C., August 8, 1969


RESULTS (cont.)

A subjective examination of the data indicates threshold values of 300 ppm Cu and 60 ppm Mo. The use of these intervals in Figures 2 and 3 shows the presence of a copper anomaly about 3200 feet by 1200 feet. A smaller molybdenum anomaly (1200 feet by 200 feet) is partly coincident with the copper anomaly. In addition, a number of erratic high values in both copper and molybdenum are scattered over the area.

The copper anomaly shows a strong linear trend at N60E which is coincident with the trend of mineralized zones observed in prospect pits on the property.

The degree of secondary dispersion of the metal ions is not yet known but, in any case, the geochemical survey has indicated a mineralized zone considerably greater in extent than that previously outlined by the prospect pits. A magnetometer survey will be conducted over the property and the results correlated with the geochemistry in order to determine drilling sites.

Respectfully submitted,


A circular professional seal is stamped over the signature. The seal contains the text: "PROFESSIONAL ENGINEER OF MONTGOMERY COUNTY, MARYLAND".

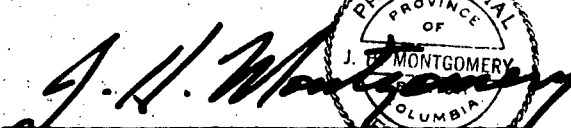
J. H. Montgomery, Ph.D., P.Eng.

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 8th day of August, 1969.


J. H. Montgomery, Professional Engineer

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