

GEOCHEMICAL REPORT ON THE  
MOLY 1 AND MOLY 2 CLAIM GROUPS  
ALICE ARM AREA, B.C. 55° 129° S. E.  
MASTODON-HIGHLAND BELL MINES LTD.

- by - 103P/6W

W. R. Bacon, P. Eng.

June 22nd - August 3rd, 1966.

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GEOCHEMICAL REPORT  
ON THE  
MOLY 1 AND MOLY 2 CLAIM GROUPS  
ALICE ARM AREA, B. C. 55<sup>0</sup> 129<sup>0</sup> S. E.  
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Vancouver, B. C.  
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I L L U S T R A T I O N S

(In pocket at back)

FIGURE 1 Index Map (1" =  $\frac{1}{2}$  mile) # 1

FIGURE 2 Geochemical Survey (1" = 400 feet) # 2

GEOCHEMICAL REPORT ON THE MOLY 1 AND MOLY 2 CLAIM GROUPS  
ALICE ARM AREA, B. C.

INTRODUCTION:

The Moly 1 (30 claims) and Moly 2 (30 claims) groups, together with the Moly 3 and Moly 4 groups, constitute a single property. It is in the Skeena Mining Division, about four miles east of the head of Alice Arm. (See Figure 1)

The property is a molybdenum prospect. From a practical exploration standpoint, it is only accessible by helicopter which was used for transportation of men, supplies and equipment - from Alice Arm to the property, and from site to site on the property.

The claim area is relatively flat, particularly for Alice Arm, and occurs at a general elevation of 2,200 - 2,400 feet. Much of it is swampy and dotted with ponds and small lakes.

With the exception of flat lying, post-mineral, Tertiary phonolite flows, outcrop on the property is exceedingly scarce. Under the circumstances, the finding of any mineral at all on the property was a noteworthy prospecting feat.

Molybdenite was found with quartz veining brown hornfels and also in quartz monzonite. The extent of the area underlain by these rock types is unknown.

A geochemical silt and soil survey was an obvious first approach to exploration of the property.

METHOD:

First, an accurate topographic map of the property was prepared on a scale of 1" = 400 feet, with a contour interval of 25 feet. Figure 2 is part of this map, retraced minus the contours, in order that the geo-chemical results are more readily discernible.

Second, a contract for 30 miles of linecutting, chaining, and picketing was let to the Audet brothers of Val d'Or, Quebec. Of this amount, 26.5 miles was done on the Moly 1 and Moly 2 groups. The base line was run in by transit and the cross-lines, at 200 and 400 foot intervals (see Figure 2), were turned off using the wooden cross employed by professional linecutters in eastern Canada.

Silt samples were taken at frequent, convenient spots along the numerous streams. They were scooped out of the bed by hand.

Soil samples were taken at 100 and 200 foot intervals along the cross-lines of the grid. They were obtained by means of a standard 1½" wood auger, two feet long from point to handle. Samples were taken from a depth of 12" to 18" and the majority consisted of wet, brown, peaty material.

Nearly 900 samples of stream bed material and soil were obtained on the Moly 1 and Moly 2 groups. Once obtained, they were placed directly in Hi-Wet Strength Kraft 32# 3½" x 6 1/8" envelopes manufactured by the Canada Envelope Co. of Montreal.

SAMPLE PREPARATION:

No sample preparation whatsoever was done in the field. As often as practical, samples were Air Expressed to Barringer Research Limited of Toronto. There the samples were dried and screened (80 mesh). Metal extraction was by fusion, rather than by cold or hot acid.

Barringer Research is a recognized leader in the field of geo-chemical analysis and research.

DISCUSSION OF THE RESULTS:

Figure 2 shows a wide range in molybdenum content of silts and soils - a variation from 2 ppm. to 880 ppm. With regard only to the Moly 1 and Moly 2 claim groups, abnormal readings were obtained on the Moly 3, 5 and 20 claims.

Soil results from a peat bog probably leave something to be desired. On the property, however, it is a fact that the higher readings were obtained in the vicinity of the original prospecting discoveries and, moreover, occur over a considerable area. Under the circumstances, the writer reasoned that further speculation on the reliability of the geo-chemical results would serve no practical purpose, neither confirming nor denying the occurrence of a covered, economic molybdenum deposit. Diamond drilling was recommended by the writer on the basis of the geo-chemical results and a machine and crew were flown to the property even before receipt of all the analyses.

(NOTE: On Figure 2, where no readings are shown at sample locations, samples are presumed to have been lost or mislaid.)

FINANCIAL STATEMENT:

Contract Line-cutting (26.5 miles)	\$ 2,396.13
Analytical work (878 x \$2.70)	2,370.60
Food for crew (includes line-cutters)	<u>812.97</u>
	\$ 5,579.70

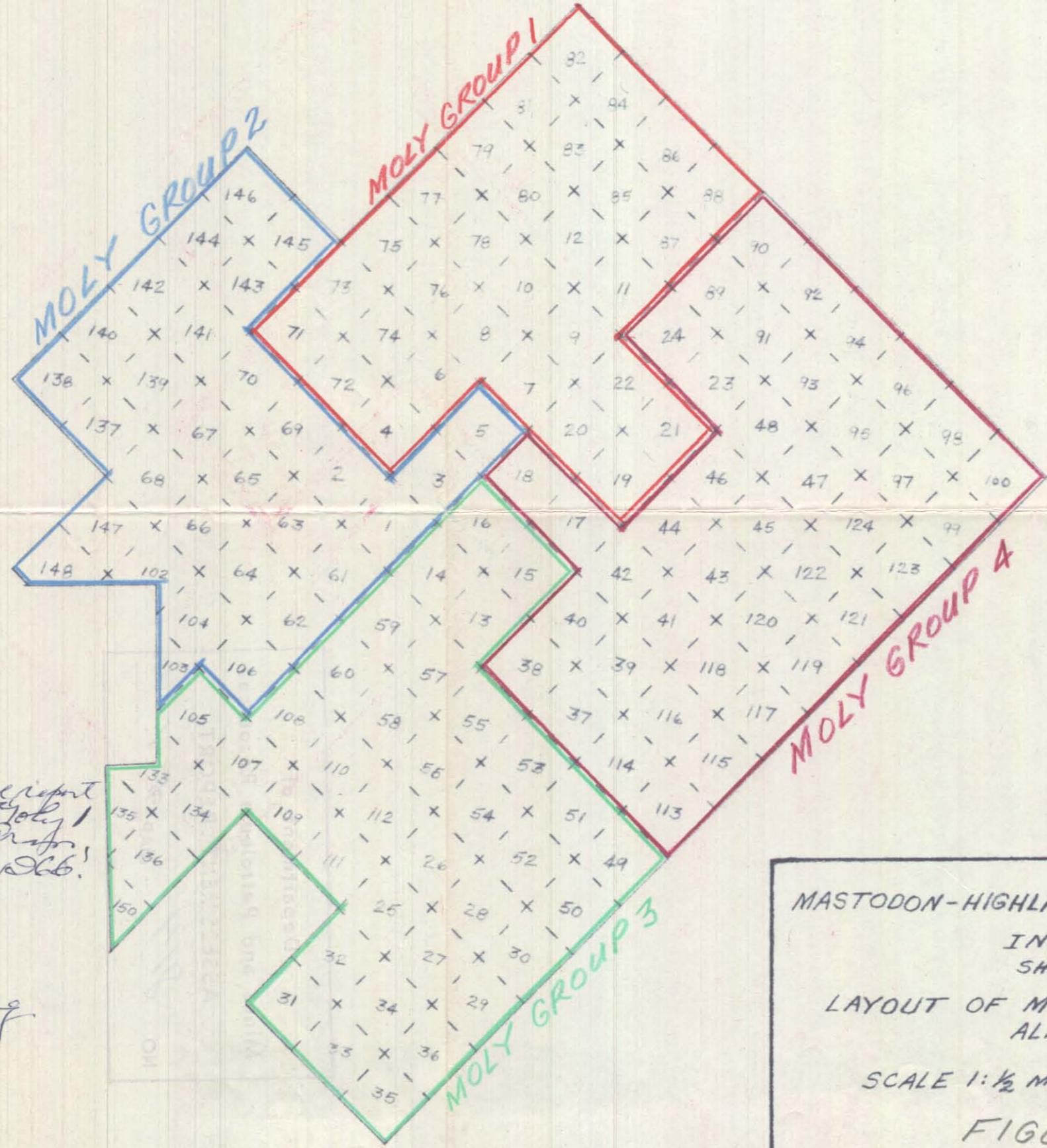
PERSONNEL (Mastodon-Highland Bell Mines Ltd.)

W. R. Bacon, P. Eng., 5 days on property (June, July 1966) @ \$50. per day.....	250.00
R. Sipprell, Head sampler, \$450./month (June 22 - August 3).....	645.00
G. Angus, Sampler, \$350./month (June 25 - August 3).....	<u>466.67</u>
	\$ 1,361.67
TOTAL EXPENDITURES.....	<u><u>\$ 6,941.37</u></u>

Vancouver, B. C.  
September 23rd, 1966.

  
W. R. Bacon, P. Eng.





To accompany geological report  
 by W.R. Bacon, P. Eng. on the Moly 1  
 and Moly 3 groups Alice Arm,  
 Skeena R.D. dated Sept. 23, 1966.

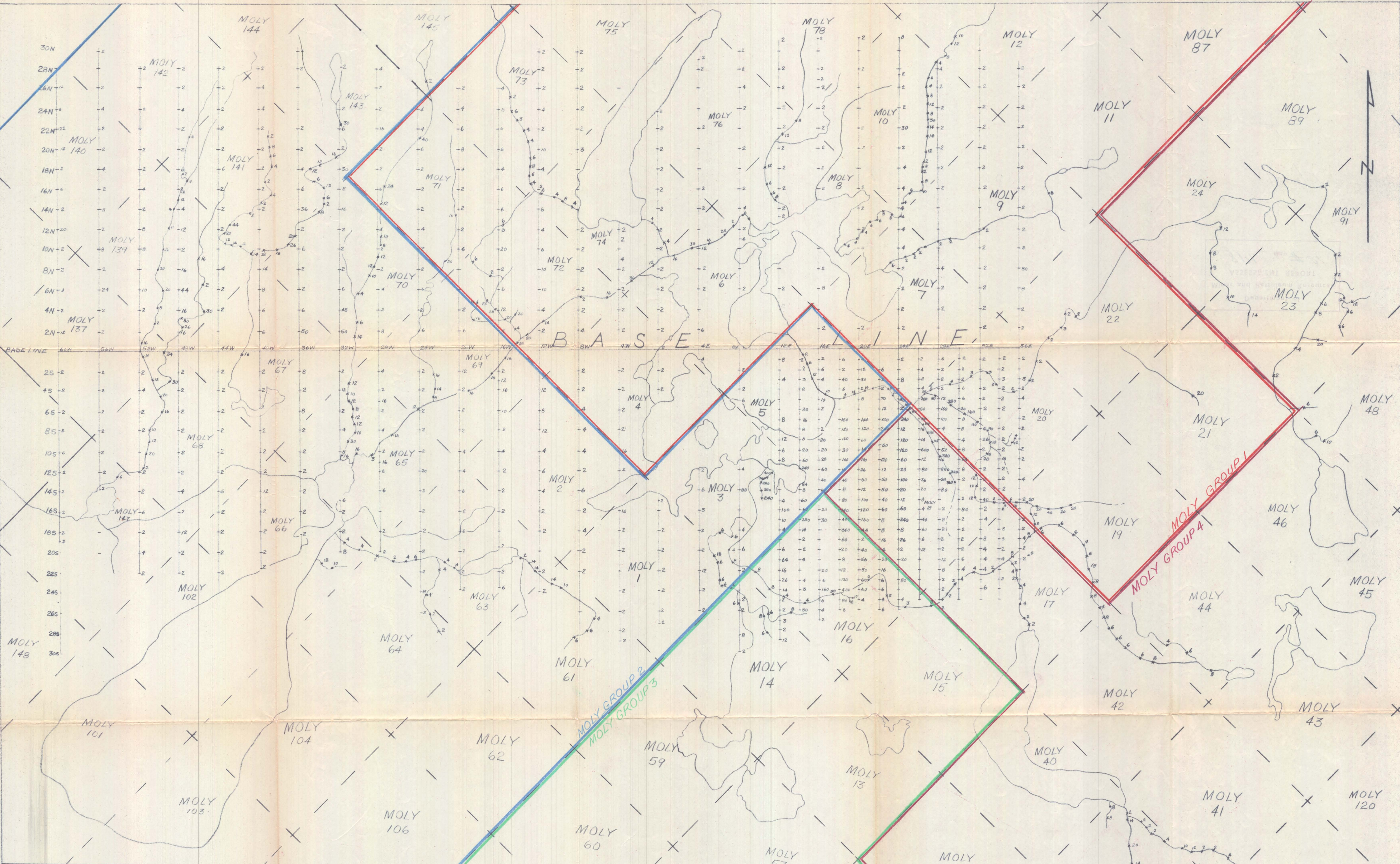
W.R. Bacon, P. Eng.



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MASTODON-HIGHLAND BELL MINES LTD  
 INDEX MAP  
 SHOWING  
 LAYOUT OF MOLY 1, 2, 3, & 4 CLAIM GROUPS  
 ALICE ARM, B.C.  
 SCALE 1: 1/2 MILE  
 SEPT 22, 1966.  
 FIGURE I





**MASTODON-HIGHLAND BELL MINES LTD**

GEOCHEMICAL SURVEY OF PARTS OF THE  
MOLY 1 & MOLY 2 CLAIM GROUPS  
SKEENA M.D.

X LOCATION OF SILT SAMPLE PPM  
† LOCATION OF SOIL SAMPLE PPM

SCALE 1:400'

SEPT 22, 1966

FIGURE II

*W. Brown, Ph.D.*

To accompany scientific report 456  
W. Brown, Ph.D. & J. H. H. 2/19/66  
Alta Area, Skeena M.D. / later Sept. 23, 1966.

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