J.G.H.

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Approved confidentially for immediate staking. Prepare AFE's when confidential stage is completed. K.L. 3/6/69

MEMORANDUM

TO: Kenneth Lieber March 3, 1969

FROM: J. G. Hansen

ok. to file now. Canm

SUBJECT: Request for Approval to Stake the Murphy Lake and Foster Lake Anomalies, Southern and Central British Columbia, Canada

Summary

It is requested that approval to proceed with the staking of the two subject areas be given so that field contracts may be prepared early in March.

Estimated Costs	Foster Lake (500 Claims)	Murphy Lake (500 Claims)
First Acquisition Costs*	35,000*	35,000*
Outside Contract Services	7,000	7,000
Wages	2,000	2,000
Geophysics	10,000	10,000
Geochemistry	5,000	5,000
Excavation	3,000	3,000
Assaying & Sampling	3,000	3,000
Surveying & Mapping	5,000	5,000
Travel	3,000	3,000
Air Charter	2,000	2,000
Totals	$75,000	$75,000

*The minimum cost to acquire each claim block would be $35,000 for each block or a total of $75,000. The balance of the budget request would be for a normal program of continued exploration during the field season.

Conclusions and Recommendations

It is recommended that we proceed with the planned staking under contract during the month of March in order to protect our land position while conducting our proposed program. It is felt that both of these areas and in particular the Murphy Lake area will attract considerable attention during the summer field season due to striking

similarities to Highland Valley. Since these geophysical data used for the evaluation were released in October and November of 1968, most exploration groups are presently evaluating the same information in a similar manner we have used.

These companies and exploration groups would normally be making their plans to hit these areas heavy when the field season starts.

We feel that Cyprus can get the jump on most organizations by moving fast and making the decision to stake in the winter before others are in the field. We have been staking in the areas A through G by using staking contractors and operating with fixed-wing ski-equipped planes and using snow shoes to get around on the ground. The cost so far has been about $70 per claim including preliminary magnetometer work to confirm our anomaly locations.

The enclosed budget chart is included to demonstrate the fact that we are well within our planned budget for the Canadian Exploration Program for 1969.

Introduction

A study of all available geologic, geophysical, geochemical and claim data related to the geologic province in the Highland Valley was initiated in November 1968. This study was extended to the north to encompass published data and included the major producing mines and prospects. As the study progressed obvious trends developed that required immediate staking which was done under our normal exploration program. (See tabulation attached showing Planned and Approved AFE's A through J.)

As a result of the Highland Valley study, it was apparent that a correlation exists between copper-molybdenite mineralization and aeromagnetic lows in the Highland Valley intrusive area. The purpose of this study was to locate similar geological and geophysical features within the Guichon Batholith and use these yardsticks in other comparable geologic environments. The study embraced a compilation of all airborne magnetic, geologic mapping, mineral occurrences and fracture density data in the focal areas.

The parameters offering a potential for success are considered to be as follows:

1) Correlation exists between aeromagnetic lows and copper mineralization at and within the geologic intrusive contact areas of the Guichon intrusive complex.

2) Association exists between aeromagnetic lows and alteration of the intrusive rocks, particularly the Bethsaida phase of the Guichon intrusive rocks.

3) Northeasterly and possible northwesterly trends exhibited by fracture patterns are associated with the mineralization.

4) The Craigmont type of copper-magnetite occurrence in Highland Valley differs from the others described above in that the environment is that of magnetic highs. This is explained by the mobilization of iron from the center of each successive intrusive and moved outwards and upwards. The iron is deposited as magnetite and in many cases is accompanied by copper. This offers another parameter of magnetic highs to evaluate for copper.

Prospect Descriptions

a) Murphy Lake - The Murphy Lake Prospect anomaly is located about 12 miles west of Boss Mountain (Noranda, See Index Map) which is a molybdenite producer. It is an aeromagnetic low of 1,100 gammas intensity and measures about 6 miles by 2 miles in dimension along a northeast trend. Discrete anomaly highs surround this magnetic low on three sides marking it as an extremely sharp, major geophysical feature. The area underlying this anomaly is a granodiorite batholithic complex of Jurassic Age.

This anomaly exhibits characteristics of the Highland Valley focal areas and has the added feature of being larger but similar to the anomalous low over the Boss Mountain orebody nearby.

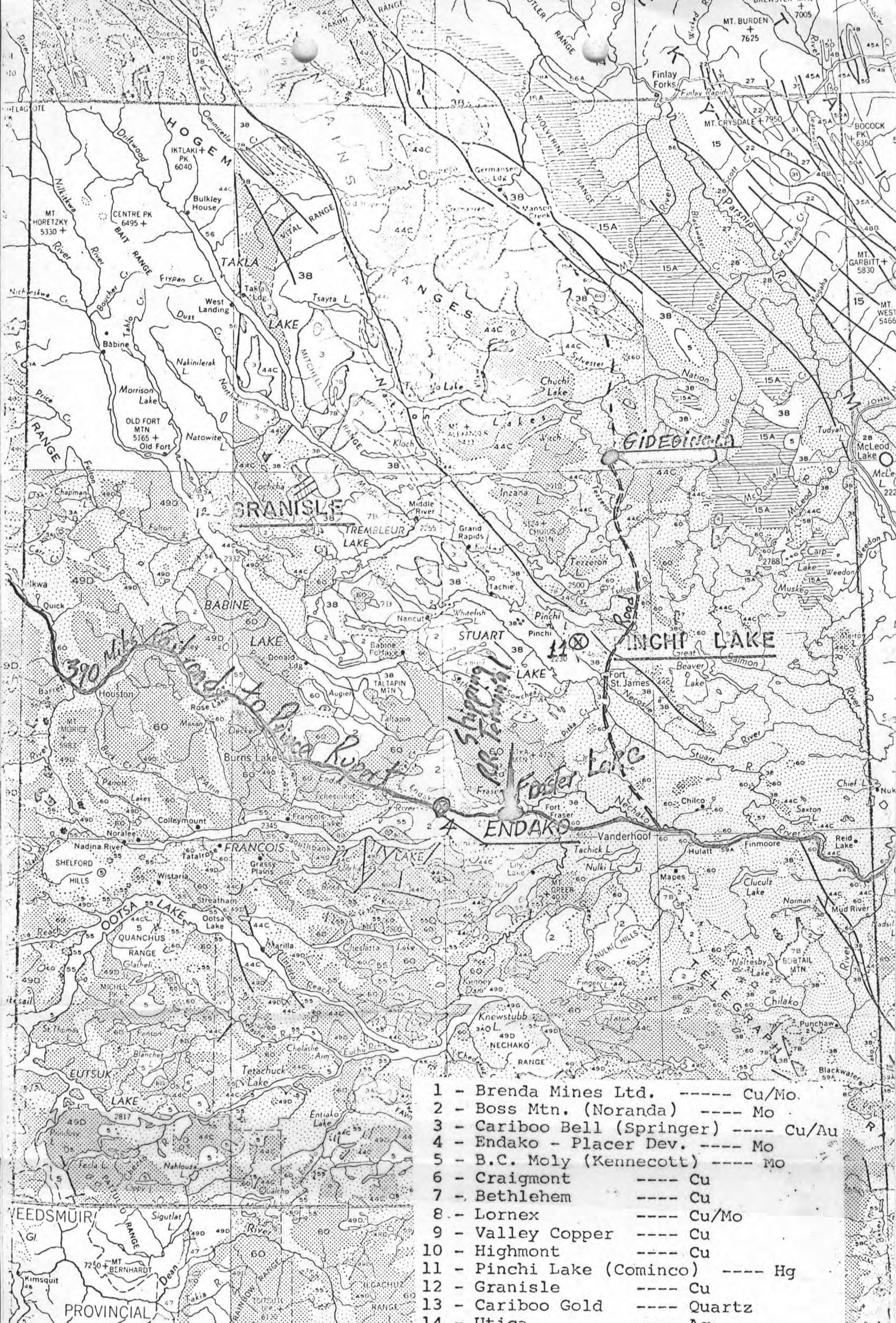
It is proposed to stake approximately five hundred claims over the Murphy Lake anomaly to protect our land position while conducting a proposed program of outcrop prospection, geologic mapping, geochemical silt sampling and ground magnetometer work. It is proposed to contract a prospector-geologist team to prospect and geologize the claim group. A camp will be provided with some road work to gain access to the area. The proposed work should evaluate the target area for a second-phase work program the following year. The total cost per claim is estimated at about $150 per claim with about $70 per claim estimated for the preliminary field work and staking.

b) Foster Lake - The Foster Lake Prospect anomaly is located about six miles east of the Endako (Placer Development - See Index Map) which is a molybdenite producer. It is an aeromagnetic low of 1,200 gammas intensity and measures about 6 miles by 2-1/2 miles in dimension along an east-west trend. Discrete anomaly highs surround this magnetic low in an accurate pattern. The area underlying this anomaly is a granodiorite batholithic complex of Jurassic Age. Nithi Mountain, which lies on the west flank of the anomaly between Foster Lake and Endako, is staked by others and is quite actively prospected. Reports of some good discoveries in this area have been heard but nothing new announced.

It is proposed to stake approximately five hundred claims over the Foster Lake anomaly to protect our land position while conducting a proposed program of outcrop prospection, geologic mapping, geochemical silt sampling and ground magnetometer work. It is proposed to contract a prospector-geologist team to prospect and geologize the claim group. This proposed work should evaluate the target area for a second-phase work program the following year. The total cost per claim is estimated at about $150 per claim with about $70 per claim estimated for the preliminary field work and staking.

J. G. Hansen

JGH/pc



1 - Brenda Mines Ltd. ----- Cu/Mo
2 - Boss Mtn. (Noranda) ---- Mo
3 - Cariboo Bell (Springer) ---- Cu/Au
4 - Endako - Placer Dev. ---- Mo
5 - B.C. Moly (Kennecott) ---- Mo
6 - Craigmont ---- Cu
7 - Bethlehem ---- Cu
8 - Lornex ---- Cu/Mo
9 - Valley Copper ---- Cu
10 - Highmont ---- Cu
11 - Pinchi Lake (Cominco) ---- Hg
12 - Granisle ---- Cu
13 - Cariboo Gold ---- Quartz
14 - Utica ---- Ag

15. Ingerbelle - Newmont - - - Cu-Mo.

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