File Hub ... 

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September 20, 1972

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Hub Mining Exploration Ltd. (N.P.L.)
605 Comox Road,
Nanaimo, B. C.

Attention: Mr. Horace Elgie, President c/o 754-7761

Gentlemen,

Re: PRELIMINARY EXAMINATION - EVALUATION
MINERALIZATION - CURRENT EXPLORATION DATA
LEGATE CREEK PROSPECT, TERRACE AREA, B.C.

PRELIMINARY

Authorization to proceed with this assignment was provided by Mr. H. Elgie. Field organization and assistance were very capably provided by Mr. E. W. Siwicky.

The results of exploration recently carried out by Bullis Engineering Ltd., were kindly provided by Mr. A. G. Jones, who also provided some much appreciated personal assistance by way of a lengthly discussion of these results and other relevant data.

The writer's field examinations were made during September 15-16, 1972 - preceded and followed by discussions with Mr. Siwicky. Field work comprised a preliminary inspection of the showings, followed by a more detailed examination, with mapping, of the principal vein exposures - the latter expedited by Mr. Siwicky's personal efforts on opening these.

Prior to the above field examination - evaluation it was thought that the winter might find sufficient geological reason to recommend for or against immediate diamond drilling. However, the characteristics of the mineralized structures, lack of information concerning their possible frequency, and

and some doubts concerning the effectiveness of the recent E. M. survey coverage, indicated that a re-oriented, higher frequency E. M. survey might provide the necessary information for any decision concerning the actual feasibility of even a limited drilling and/or trenching program.

GENERAL GEOLOGY OF PROSPECT

The showings situate within a wide, steep talus slope, between elevations 4500-4800 ft. They comprise lenses and more tabular masses of high-grade Ag-Cu-Pb-Zn sulphide mineralization within shear and fracture veins - locally up to 4 feet wide within the current exposures. These occur within the regional Hazelton andesitic and basaltic lavas, tuffs, and breccias.

The local mineralization appears to occur within both members of two distinct sets of fracture structures - one set generally striking northeasterly and dipping southeasterly, and the other striking northwesterly to westerly and dipping flatly southward (locally northward). Within the area of the showings at least, these appear to occur as well mineralized branches or 'fins' which diverge from a through-going N.E. - striking, S.E. - dipping shear-vein. The few existing bedrock esprosures indicate that at least three such 'fins' are present, with the possibility that others may occur below the general talus cover.

On the basis of detail contained in G.S.C. memoir 212, it is apparent that the Hub vein pattern is not entirely localized to this prospect; this reference notes that similar shear and for fracture vein-systems occur on the nearby "M and M", Frisco", and "Tona Mary" Groups - the sulphide mineralization variously occurring in both volcanic and plutonic igneous rocks.

RECENT ASSAYS

The results of 2 of the 13 assays recorded appear to derive from the vein-type of mineralization which originally prompted the early exploratory work and selective mining operations on the Hub property; the majority appear to have been taken from more-or less visibly mineralized wall rock adjacent to some vein-sulphide occurrences. Probably, the majority (11) of these were taken to assess the 'bulk-potential' of dispersed mineralization in the volcanic wall rocks alone; hence, do not provide either a measure of the local vein-potential or of the aggregate vein and dispersed mineral potential. The pattern of existing drill holes does not permit of such an assessment either.

RECENT E. M. SURVEY

This was carried out by Bullis Engineering Ltd., using a pair of "Sharpe 5-300" transceivers in shoot-back mode. This was done (Mr. Siwicky's personal to writer advice) on E-W grid-lines at 100 foot slope spacing, 100'to 400' instrument-spacing, and readings on 50 foot line-intervals. The actual effectiveness of the grid orientation, line-interval, and instrument separation used, if adhered to throughout the survey is, in the writer's opinion rather doubtful in view of the indicated attitudes and spacing of the observed veins.

RECOMMENDATIONS

On the basic of Mr. Siwicky's personal findings in respect of a few short N-S traverses using the Company's M-scope (H.F.-E.M.), and on the basic of the writer's impressions of the predominantly transverse trend and near-massive character of much of the local mineralization, a systematic high-frequency E.M. survey (M-Scope, or more flexible unit) was suggested.

This would be done on N-S grid - lines spaced at 100 (locally 50 foot E-W spacing. With reference to the present grid, the survey would, initially at least, be run over a grid contained by lines through 5 1/2 S. and 11 S. and 100 W. and 300 E.

The results of the recommended survey - which would be relatively inexpensive - might enable the writer to make a - better founded decision as to whether or not trenching and/ or dismond-drilling would constitute feasible and effective means of actually assessing the one potential of the property. The high cost of trenching and/or diamond drilling in this locality warrants the relatively small expense which would be incurred by the suggested geophysical work.

Respectfully submitted.

W. M. Sharp,
P. Engineer.

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