

April 1, 1988

092J/7

## MEMO

TO: W.C. Day

FROM: G.A. Clothier

SUBJECT: Summary Review of LILL PROJECT:  
Specifically 1988 program and Report by Peter Hannigan

I have reviewed the P. Hannigan's report on the Lill project and find his observations most interesting. Having visited the property a number of times while the 1988 program was underway and examining most of the work areas and diamond drilling results obtained, I have made the following observations which I feel are important to the ongoing evaluation of the property.

The stratigraphy of the Cadwallader group of Triassic age consists of thick sequences of andesitic pyroclastics, flow rocks and feeder dikes or sills. Mineralization is partly exposed over at least a 6 km trend which is roughly conformable to the regional trend of the Cadwallader rocks. Of particular significance is that in every case this mineralization is associated spacially with acid volcanic rocks, minor cherts, limestones and generally coarse fragmental rocks and or breccias. These rock types make up a specific unit which makes up only a minor proportion of the overall section. This unit represents the late phase differentiate deposition expected at the end of a volcanic cycle and the limestone a period of negligible volcanism.

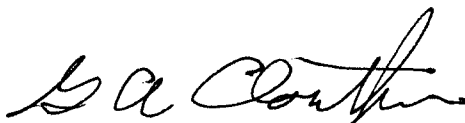
It is within this geological framework that volcanogenic massive sulfide mineralization might be expected. The extensive copper-zinc geochemical anomalies and significant, though at this point sub-economic, sulfide mineralization observed in outcrop and drill core within this lithologic environment support this concept.

Specific sulfide occurrences often appear to be fracture filling, discontinuous and are not conformable. Many also show characteristics of skarn deposits. In order to understand this apparent disparity between specific occurrences and a typical volcanogenic deposit, the regional geological history is important. Subsequent to Cadwallader deposition in Triassic times the region was intruded by Jurassic rocks related to the development of the coast crystalline complex and subjected to attendant mountain building tectonics and metamorphism. This led to metamorphism and block faulting of Cadwallader rocks and probable recrystallization, remobilization, and faulting of

sulfides within this formation, hence the complexity of sulfide-wall rock relationships and mineral relationships and textures in specific areas.

I feel strongly that the overall lithologic control of sulfide distribution indicates a volcanogenic origin despite local textures. At this time less than 5% of the favorable ground has been drill tested and exposures are limited along the favorable trend, therefore, the potential remains excellent for development of a significant ore body. As economic models in similar geology the nearby Britainia Mine or Western Mines on Vancouver Island could be considered.

Respectfully,

A handwritten signature in cursive script, appearing to read "G.A. Clouthier".

G.A. Clouthier, B.Sc, FGAC  
Chief Geologist  
Goldrich Group

James Paper - Britannia Pedant

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G.A. Clouston, B.Sc., F.G.S.  
Chief Geologist  
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