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PROPERTY EXAMINATION

18th Sept. Donna Mines - Burnt Basin Property: Christina Lake Area, B.C.
Pb, Zn, Ag

The report by Chisholm gives all the pertinent facts on the claim block as known to date, and remarks will be confined to observations and queries rather than repetative description.

The present work by Donna Mines is being directed in an effort to establish continuity between the present spotty gopher-hole showings and redefine previous magnetometer surveys.

Previous magnetometer work and direct observation of mineralized showings indicates an association of magnetite, pyrite, pyrrhotite, sphalerite, and galena, occasionally with chalcopyrite and invariably with some silver values. The surveys appear to have been somewhat slapdash and while the actual work was done on a temporary grid the results were plotted on a previous and not altogether corresponding grid.

So far efforts to extend the known mineralization along a linear strike by bulldozer trenching without ripping equipment, has proved unsatisfactory. Sufficient is seen in most of the showings to establish that the folding of the limestones and argillaceous limestone bands is complex and of at least two generations. In some cases the mineralization appears to replace and trace out narrow horizons in early isoclinal folds. These and later more open chevron folds are in turn cut by numerous dykes of dioritic aspect containing abundant biotite, which might be termed lamprophyres.

In almost all cases dyke material is adjacent or close by the mineralized sediments. Donna Mines consultant, Mr. H. Sheer, considers the intrusive dykes to be related to a larger intrusive body of dioritic material exposed in the area adjacent to the showings, and sites the above association as evidence for the mineralization being due to the intrusive material either as a source for the sulphides or at least causing fracture avenues in the sediments.

My observations suggest that Dolmage's opinions cited in Chisholm's report are more realistic and the mineralization is replacing a specific horizon or horizons of argillaceous limestone. This horizon was folded twice prior to the intrusion of the dykes. Where dykes have cut a mineralized horizon there has been some slight remobilization and redistribution along the dyke walls. The association of dyke material with mineralization is probably more apparent than real, if as I suspect they form a fairly intense swarm in this locality. Fairly flat but plunging recumbent folds would explain the sporadic nature of the shallow pit showings designed as they are to follow a linear striking mineralized zone. If the mineralized horizon were (a) more than a few feet in width and (b) was doubled or quadrupled in thickness by the repeated folds it seems reasonable to assume that a fairly useful mass of sulphides would result, which would respond readily to magnetometer E. M. and I. P. geophysical methods. Although this data is not yet available to us the descriptions of previous I. P. and magnetometer work do not suggest any very positive anomalies which would indicate a large near surface orebody. This would be consistent with previous drilling sited on or near the known showings, which failed to intersect more than a few feet of mineralization.

Recommendation

The previous data will be assembled, and together with the present work should be scrutinized, but it seems unlikely at this point that the property, which is only 80% controlled by Donna Mines, would be of prime interest. Perhaps the best method of testing the property would be to carry out susceptibility tests on the sulphides and, if applicable, do a deep penetrating E. M. method (Turam) over the area of interest. Although graphitic schist is mentioned as a possibility by Chisholm, none was seen in the showings area or in road cut exposures leading to the property.