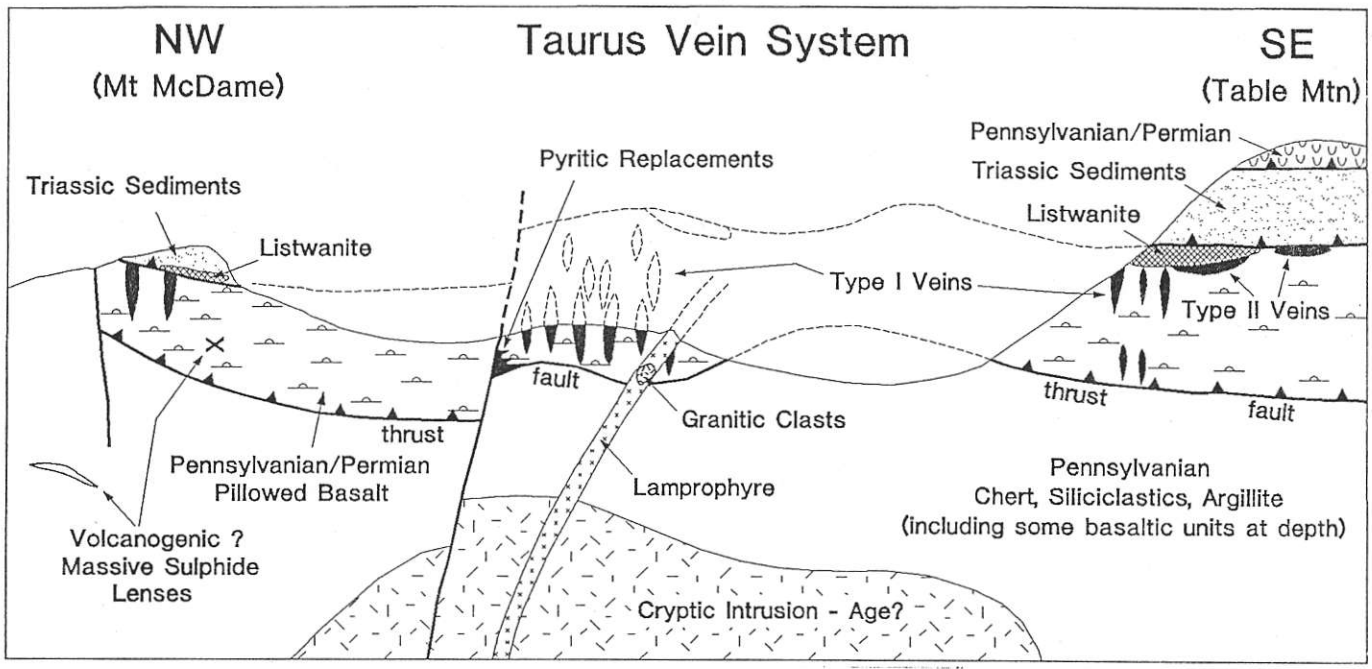

Figure 6. Schematic model for gold mineralization in the Cassiar district showing relationship between Type I steep, volcanic-hosted veins and Type II ribboned, carbonaceous veins at volcanic-sediment contacts, commonly thrust faults, with listwanite alteration. A hypothetical cryptic intrusion (Nelson, 1990) is shown, as suggested by the presence of granitic clasts in lamprophyre dikes that cut mineralization.

additional dating by $Ar^{40/39}$ and conventional K-Ar methods. Also some intrusive rocks and two samples of the granitic clasts in lamprophyre dikes in the Taurus mine area have been submitted for U-Pb zircon work.

A schematic model showing the distribution of quartz veins in basaltic rocks, with a classification of veins according to Panteleyev and Diakow (1982) as Type I and Type II veins, is shown on Figure 6. The figure shows a hypothetical intrusive body, the cryptic intrusion of Nelson (1990), that might underlie the Cassiar gold deposits and is in evidence as clasts in lamprophyre dikes that cut the auriferous quartz veins. If the age of the intrusion is the same as the apparent 130 Ma age of mineralization, there could be a genetic connection between it and the veins. If the intrusion post-dates the veins, the relationship is simply a structural one in which the intrusion has uplifted the veins, notably in the Taurus mine area where the underlying cherty rocks are near surface.

As matter of additional interest to exploration geologists, it is noteworthy that a drill intersection in basalts (drill hole T96-14) cut an approximately 1 metre-thick cupriferous, pyrrhotite-bearing massive pyritic body (or vein ?). Other massive sulphide mineralization

ACKNOWLEDGMENT

Appreciation is expressed to Geoff Sinnett for assistance in the field, for map information capture, digital data management and drafting of Figures 3, 4 and 5. The access to all Cyprus Canada Incorporated drill logs and other geological information, and the use of the Quartzrock Creek camp as well as the hospitality of Cyprus Canada and International Taurus geologists in the field are acknowledged. Bruce Spencer and Bill Howell, International Taurus Resources Limited, and Mike Glover and Leslie Hunt [formerly Mortimer], Cusac Gold Mines Limited, provided invaluable discussion, access to samples and information. Discussions with Chris Ash and the use of his unpublished figure and some of his information are acknowledged. Mike Fournier adeptly drafted and edited Figures 1, 2 and 6.

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