

Torbrit
866 812
host
at 9.100/t
Ag
.42% Pb
.50% Zn

GAC/Van Jones/80

675268
103P/13

- 10 -

ALICE ARM SILVER DEPOSITS, WEST-CENTRAL B.C.

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Victoria, B.C. V8V 1X4

The Alice Arm district is host to more than 50 known silver deposits and occurrences. Major production in the past was from the Dolly Varden and Torbrit properties, which had a combined production value of \$330 million at present day metal prices.

Available data suggest several stages of silver mineralization in the district and the deposits may be classified into five distinct types on the basis of mineralogy, morphology, and host rock. Simplest of these are narrow quartz veins containing silver minerals plus pyrite, galena, sphalerite, chalcopyrite and minor gold which represent late stage mineralization in Bowser Assemblage siltstones marginal to Eocene molybdenite-bearing granitic stocks. Quartz-sulphide veins of similar form and mineralogy occur in slightly older Middle Jurassic (Hazelton Group) sedimentary rocks north of Alice Arm and are believed to be related to Coast granitic rocks. An epiclastic volcanic sequence east of Alice Arm contains silver-bearing quartz veins in which the silver values are directly proportional to lead content, as opposed to other deposits in the district.

In the upper Kitsault valley north of Alice Arm hypabyssal intrusive rocks (volcanic centres?) are host to widely dispersed copper-silver-gold mineralization. South and east of this zone are the Torbrit-type quartz-barite-jasper-pyrite replacements, hosted by Middle Jurassic subaerial volcanic rocks and characterized by a variety of silver minerals, low lead and zinc values and significantly, very little gold. These replacement deposits, gradational to classic vein systems, are believed to be related to volcanic processes.