

CIM Dist 6 Victoria
Oct 3/88
675057
920/8

Coffee - 3:20 - 3:40 p.m.

Paper No. 7 -- 3:40 p.m.

"GEOLOGY OF THE BLACKDOME GOLD-SILVER DEPOSITS, CLINTON, B.C.

DAVID, RENNIE, Senior Geologist, Blackdome Mining Corporation-

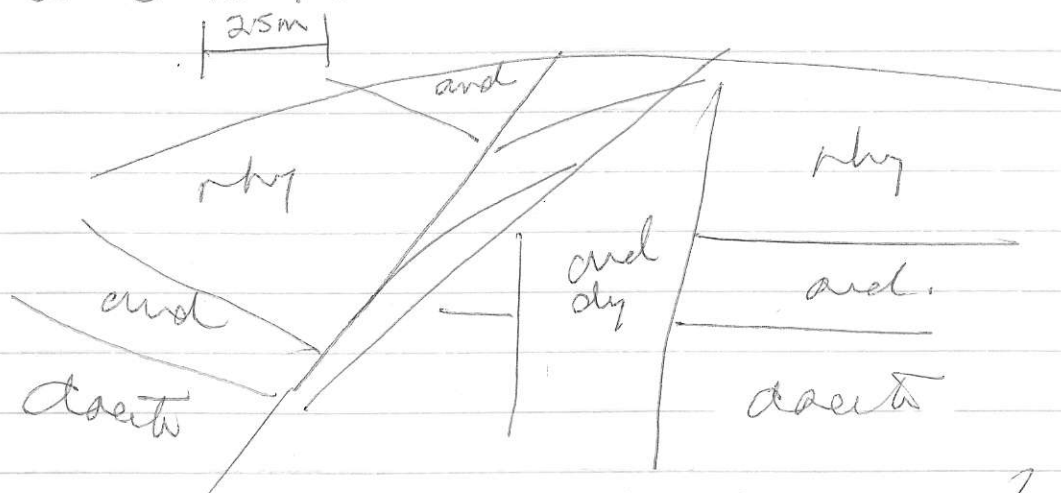
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The Blackdome deposits, located 250 kilometres north of Vancouver, B.C. are Tertiary epithermal gold-silver deposits typical of many throughout the North American Cordillera. They are characterized by small, high-grade ore shoots emplaced in a hot-spring type of environment. Gold and silver mineralization occurs along several steeply dipping, northeasterly striking fault zones in Eocene volcanic rocks. Ore minerals consist of fine- to medium-grained native gold, silver and electrum, as well as two selenium minerals, aguilarite and naumannite. Accessory minerals include tetrahedrite, chalcopyrite, pyrite, sphalerite and galena. These minerals are disseminated throughout quartz stockworks and breccias up to three metres wide along the faults. The host rocks are calc-alkalic tuffs and flows which vary in composition from andesite to rhyolite.

Two major fault zones, the No. 1 and No. 2 vein systems, have been the focus of the most recent exploration work on the property but many more veins are known to exist in the area. At the end of 1985, cut and undiluted ore reserves in all classes were estimated to be 185,000 tonnes grading 27.23 gm/tonne Au and 129.75 gm/tonne Ag. Production at a rate of 185 tonnes per day is presently underway.

Blackdome - Rennie

stackwork shorts & slender, esp. thin
50 - 100m down dip extent of shorts
2-3m thickness



rocks all independent, dip away from
Blackdome area at 0-15°.

Thin bedded phylite - approximately West
Phylite layers thick.

Shear zone contacts unimolysed.

Dry coechny textures in gtz areas.

Spherical silica spherulites - organ? ^{maybe like melanophan}

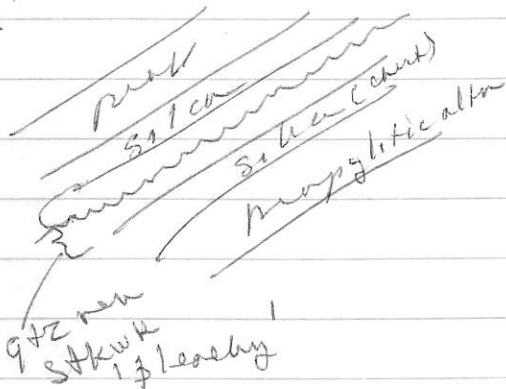
metable minerals rare, to the extent, esp
to galena, sphal, kalschidat,

Agulants, naumannite by silicates primarily

Sought to be acanthites

Fatuse lechy, replaced by adularia, sericite, gtz

Wth:



No Hg

will start in May
Rennie ~ 93%
0.73-0.75 oz head grade

Calcite virtually absent

Ag recovery in both range
head grades 3-4 oz/t

no mag expression. the best geochem