

1630 0018
PROPERTY NAME: Homestake Mine

OTHER NAMES:

MINERAL COMMODITY(IES): Au, Ag, Cu?

TYPE OF DEPOSIT: Epithermal

ACCESSIBILITY:

OWNERSHIP:

PRODUCTION:

HISTORY:

County: Lincoln Item 18

Mining District: Eagle Valley

AMS Sheet: Caliente

Quad Sheet: Deer Lodge Canyon

Sec. 19, T 1N, R 71E 7 1/2'

Coordinate (UTM):

North 4 2 0 1 3 5 0 m

East 0 7 5 7 4 8 0 m

Zone +11

DEVELOPMENT: Glory hole or stope follows vein structure for several hundred feet. Short shafts are inclined along vein at west edge of stope. Stope is about 10-15' deep. There are other shafts & shallow workings in area but they are not extensive.

ACTIVITY AT TIME OF EXAMINATION: None, but area near mine is staked.

GEOLOGY: Glory hole explores N to N15E, 40-50° W quartz-adularia (alunite?) vein which appears to have been emplaced along shear zone of the same orientation. Fault is probably pre-mineral, as altho slicks are present on footwall andesites, the main body of the vein is relatively unbrecciated. Upper portion of explored vein consists of massive to cockade quartz which encases silicified andesite & possibly some rhyolite fragments which were probably ripped up & incorporated in vein during emplacement. The main body of the vein & that portion which is best mineralized & explored by inclines is a massive to banded, sugary to chalcedonic, greenish-white quartz-adularia(?) vein which, in exposure, exceeds 5' in width. Most of the quartz in this portion of the vein is very fine-grained & typically forms undulatory chalcedonic bands parallel to the vein strike. Some of the bands are dark with dispersed fine-grained sulfides which are probably Ag-bearing minerals, & in several samples very fine-grained free gold was noted in the sulfide-rich lenses. Gold also occurs with pyrite, minor chalcopryrite & blue metallic sulfides in fine-grained clots dispersed randomly throughout sugary quartz vein in dump samples & in outcrop. The gold-bearing, fine-grained quartz vein is crosscut by late-stage, clear, vitreous, open-centered fissure veins & veinlets which carry pyrite.

The hanging wall & footwall andesites are Fe-stained, bleached, silicified & heavy quartz-veined. The rocks are notably brecciated(slicks are abundant) & show a network of crustiform quartz veins & veinlets which extend outward into wallrock adjacent to main vein. Quartz veining of wallrocks increases width of vein exposure to 10' or more. Main vein is sheared by several small E-W structures, & may be truncated by one such structure at the southern end of exposure.

REMARKS: Samples 1727 - Free, very fine-grained gold in chalcedonic quartz vein.
1728 - Quartz-vein breccia.

REFERENCES:

EXAMINER: Bentz/Smith

DATE VISITED: 9/19/83