3180 0008

PROPERTY NAME: Morey Peak Mining District - General overview

OTHER NAMES:

MINERAL COMMODITY(IES): Ag, Zn, Mo?

TYPE OF DEPOSIT: Epithermal vein deposit

ACCESSIBILITY:

OWNERSHIP: Superioe Oil leases much of the district.

PRODUCTION:

HISTORY:

(541) Hem 8

County: Nye

Mining District: Morey Peak

AMS Sheet: Tonopah

Quad Sheet: Morey Peak 7-1/2'

Sec. 5, T 9N, R 51E

Coordinate (UTM):

North 4|2|8|0|1|2|0 m

East 0|5|6|4|9|3|0 m

Zone +11

DEVELOPMENT: Numerous old workings, recent drill rds & drill holes, dozine of the old dumps. Old Komes in bottom of canyon.

ACTIVITY AT TIME OF EXAMINATION: None on day of examination, but Superior Oil has been & is still active in the area.

GEOLOGY: The Morey Peak District located about 3 mi. N,NW of Morey Peak, is a classis epithermal vein deposit. The district was first discovered in 1865 & was worked rather consistently up to 1891, and then again in the 1930's & 40's. The early workings explore hi-grade narrow Ag-bearing vein deposits.

The host rks for the deposit are intracaldera ash-flow tuffs of the Williams Ridge & Morey Peak Fm. In the vicinity of Morey Peak to the south a resurgent flow forms a sing. & cooling unit about 5,000'thick. The unaltered rk outside (just south) of the district is prob. rhyolitic? in composition w/qtz. hnbld & K-spar phenos set in a pinkish silic ground mass. Within the district, the tuff is (hypogene, qtz-sencite, propyllitic) altered & contains dessiminated pyrite & chalcopyrite. Kral notes that the workings are all in a porphyritic quartz-latite.

Several aprallel, mineralized veins cut the tuffs along an E-W strike w/steep southern or vert. dips. The veins were probably emplaced along shears, but are not brecciated. Some of the veins near the old workings are oxidized in their upper portions and most of the veins have a banded appearance (fissure type) w/vuggy, drussy qtz. As the primary gangue mineral. The veins typically contain rhodociosite & sphalerite which form bands within a Ag-bearing qtz vein. The principal Ag mineral minted in the past was andorite, but Ruby Ag was found in the dump samples we collected. The veins also carry owhyite, amesonite (Pb, Sb, S) cassiterite (Sn O), angorite & sulfide. Pyrargyrite & stephanite are reported by Kral in UNR Bull. No. 50 (Geol & Ming. Series). The variety of minerals suggest a complex system resulting from several different episodes of mineralization.

REMARKS: A N-W striking fault is located just west of the old workings. The fault which displaces the mineralized veins is thought to be related to Basin & Range tectonics. The rks on the W side of the fault are uplifted, exposing the sericitically altered tuffs which lie below the propyllitic altered tuffs which are exposed on the E side of the fualt. There is prossibly as much as 3,000' of vertical displacement along the fault.

A drill rd climbs the steep talus slope of sericitized tuff west of the old workings. The drilling on the W side of the fault was done to explore a molybdenum porphyry which is thought to underlie the tuffs. The halo of hydrothermally altered tuffs at mapped is probably caused by the underlying igneous body.

REFERENCES:

EXAMINER: Benta/Bonham/Smith

DATE VISITED: 6/27/81