1900 0007

PROPERTY NAME: Sample location 1763
OTHER NAMES: New Freiberg Project
MINERAL COMMODITY(IES): Cu, Pb, W, Zn?, Ag?
TYPE OF DEPOSIT: Replacement, fault, contact metasomatic
ACCESSIBILITY:
OWNERSHIP: See sample location 1761 & 1762
PRODUCTION:
HISTORY:

County: Lincoln (169) Item 7
Mining District: Freiberg
AMS Sheet: Caliente
Quad Sheet: Caliente 2° sheet
Sec. unsurv. T 1N R 57E
Coordinate (UTM):
North 4 1 9 9 0 0 0 m
East 6 2 4 2 0 0 m
Zone 11

DEVELOPMENT: Canyon has several old shacks. Evidently this is main site of old mining town. Workings are scattered thruout canyon, most are of relatively small extent. Low slopes within canyon have been drilled & scrapped (surface exploration).

ACTIVITY AT TIME OF EXAMINATION: Property was drilled 3-5 years ago. Area probably still intermittently active on a small scale- i.e. reworking of dumps, etc.

GEOLOGY: Sampled workings consist of one north-trending adit & 1 shallow (4-5'deep) prospect in altered carbonate rock. Prospect (caved shaft?) is about 20' west of adit. Adit is of small extent, probably less than 100'deep.

The host rock for the deposit is tan to grey-brown limestones which from beds about 1-2' in width. The limestones, which are part of the Ordovician Pogonip Group, dip shallowly to the N or NW in area of the workings. Locally the rocks are moderately silicated to a greenish-white, dense calc-silicate. Other types of alteration effects observed are recrystallization (marbelization), bleaching & brecciation of the limestones.

The limestones exposed at portal of adit are fractured & brecciated, indicating adit may follow a north-striking fault zone. However, a better exposed fault/vein is seen in the prospect to the west. A brecciated & altered zone about 5' in width strikes N30E & is vertical. The fault surface show slickensides & calcite & chlorite (epidote) gouge are deposited along the fracture. Within the zone limestone breccia fragments are cemented by white calcite or cut thru by radiating veinlets of calcite. An E-W fault zone (part of & intersecting the N30E zone) was also observed. Near portal of the adit, the E-W fault zone is marked by slight silicification of the wallrocks, & recrystallization of the host. The rocks have a light green color due to silication process. The silicated limestone is greenish (epidote), mottled & is associated with gossan & abundant Fe & Mnoxs.

Sample 1763 consists of limonitic & hematitic gossan with clots galena, chalcopyrite (oxidized), malachite & possibly sphalerite? The gossan has fine opaline coatings. Calc-silicate & recrystallized limestone from the dump is marly, light colored & contains irregular lenses of calcite & abundant clay & Fe & Mnoxs coatings. The rocks are dense & may contain fine-grained sulfides. When lamped the rocks showed scattered minute flecks of scheelite.

REMARKS: The county geologic map shows that the working is located just (S) E of a leucocratic granite stock which intrudes the limestone. Some chloritized hornblende diorite was found in float, indicating more mafic dikes are present in the area.

*Note: Road to main Freiberg Mine, located at head of this canyon, was never found since maps not available for this area. Road below main minesite looks washed out from distance.

Sample 1763

REFERENCES: NBMG Bull. 73

EXAMINER: Bentz/Smith
DATE VISITED: 10/7/83