3570 0006

Lincoln Co. General Item 32

PROPERTY NAME: Pennsylvania Mine (South)

OTHER NAMES:

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

TYPE OF DEPOSIT: Vein epithermal, fault

ACCESSIBILITY:

OWNERSHIP:

PRODUCTION:

HISTORY:

County: Lincoln

Mining District: Pennsylvania

AMS Sheet: Caliente

Quad Sheet: Ella Mtn. 7 ½'

Sec. 16? , T 6S , R 67E

Unsurv.

Coordinate (UTM):

North 4 1 4 3 9 0 0 m

East 0 7 2 3 5 1 0 m

Zone +11

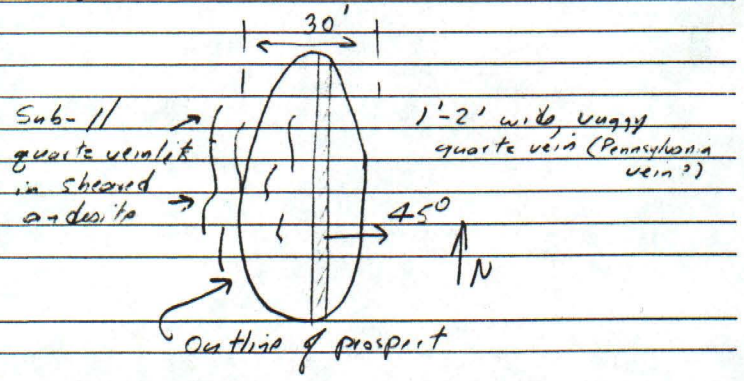
DEVELOPMENT: Original workings possibly caved or obliterated by trenching. Existing workings consist of several connecting shallow prospects & trenches. Old timbers & piles of ore in area.

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

GEOLOGY: A N-S elongate prospect about 30' in length & 6-10' in NW part of mine area provides a good exposure of geology. The rocks within the prospect are propylitized & silicified, quartz-veined andesites (?) (USGS Map shows mine area underlain by Miocene ash-flow tuffs which are hydrothermally altered & intruded by numerous mafic dikes.) The volcanics are sheared along a N25W orientation. Quartz veins parallel the shear zone forming a sheeted vein system. The shear zone ranges from 10-30' in width. Slickensides within the zone are steeply inclined & coated by Feoxs & quartz. The quartz veins are generally sub-parallel & numerous. Many are emplaced along both hi & low-angle fractures. Most of the veins are vuggy, open-centered & fissure type. The veins are composed of white, massive-comb & sugary quartz, some of the veins are steeply inclined & others are shallow or almost horizontal. On east side of trench there is a 1-2' wide massive to vuggy quartz vein & quartz -veined breccia which dips about 45° to the east. This is probably heart of main Pennsylvania vein. The andesites immediately west of the vein are Fe-stained & laced by quartz veins & veinlets, which are mostly N-NW striking & more steeply inclined than main vein. Relatively small amount of Fe & Mn oxs is associated with vein material, & in general the quartz contains only a small amount of finely crystalline pyrite, chalcopyrite, unidentified dark skulfides (Ag mins?) & Cu & Mn oxs. Clots of Cuoxs probably formed from the oxidation of tetrahedrite. Some dark grey quartz may indicate higher percentage of dispersed, finely crystalline sulfides. Minor calcite vein & gossany boxworks also observed.

South of the mine area, a small E-W ridge is underlain by fine-grained clastic & conglomeritic rocks (G PM?) which are cut by a network of 1-2" wide quartz veins. Larger veins are open centered & have a N70E trend, paralleling a high-angle joint or shear pattern developed in outcrop.

REMARKS: Samples 1703- From outcrop near (south of) prospect (NW part of mine area)
1704- From outcrop near sedimentary/volcanic contact (southern part of mine area).



REFERENCES: USGS Map I - 1041

EXAMINER: Bentz/Smith

DATE VISITED: 9/13/83