

2310 0007

PROPERTY NAME: Manhattan Tunnel (Mine)

OTHER NAMES: _____

MINERAL COMMODITY(IES): Pb, Ag, AuTYPE OF DEPOSIT: Vein/GossanACCESSIBILITY: See map, road goodOWNERSHIP: UnknownPRODUCTION: 248 tons ore in 1938HISTORY: Explored 1860-1980's, only production in 1938.
Several stages of activity and exploration up to present.County: Lincoln(175)
Item 58Mining District: HighlandAMS Sheet: CalienteQuad Sheet: Highland Peak 7 1/2'Sec. 8, T 1N, R 66E

Coordinate (UTM):

North 4 2 0 3 9 0 0 mEast 0 7 1 1 5 0 0 mZone +11DEVELOPMENT: Several caved shafts, adits, surface cuts, trenches, and numerous roads not shown,
several stages of drilling and exploration, most of older workings obliterated from more
recent exploration.ACTIVITY AT TIME OF EXAMINATION: None

GEOLOGY: Workings explore quartz vein system in elliptical skarn which has oxidized to a
gossan zone. Skarn results of quartz monzonite intrusive body which has been bleached and
argillically altered on exposed surfaces. Much of the intrusive was later shattered and
recemented with anhedral milky-grey quartz, probably during emplacement of quartz veins.
The skarn is hydrothermally altered to a Fe-Mn gossan from poorly formed andradite-pyrite
crystals. The gossan body is cut by massive white quartz veins which are prominent on the
surface and traceable for hundreds of feet. The veins are generally vertical with a general
easterly trend with randomly oriented quartz stringers. Other quartz veins strike N60E and
dip steeply southeast. Some veins are up to 5 feet thick and are interspersed with hematite
stained jasper. Veins are composed of massive to subhedral quartz crystals. Malachite stained
quartz in float. Cockscomb quartz line cavities. The veins carry crystals and massive clots
of oxidized pyrite which are slightly magnetitic (intergrown pyrrhotite? magnetite?) and
molybdenite/galena. quartz veins are shattered almost to the point of brecciation
The skarn zone has an abundance of sericite intergrown with the oxidized andradite giving the
appearance of a schist. Locally, faulting occurs parallel to contact between the intrusive
and the quartz veins. Limonitic "jasper" was noted in float. The quartz veinlets have an
abundance of open spaces suggesting shallow depth during emplacement. Late stage bluish-white
silica coats gossan. Few outcrops are exposed with most of the slopes covered with plant
growth and soil.

REMARKS: Sample site 1394 4203900N 0711500E
1395 4203900N 0711500EREFERENCES: USGS PP 171, NBMG Bulletin 73EXAMINER: Smith/BentzDATE VISITED: 9/20/83