

1900 0004
PROPERTY NAME: Freiberg Mine
OTHER NAMES:
MINERAL COMMODITY(IES): Ag, (Pb, Zn, Cu)
TYPE OF DEPOSIT: Replacement (disseminated), vein
ACCESSIBILITY:
OWNERSHIP: Freiberg Mining Corp., Lynn Shirley, Manager, 301 South
11th street, Las Vegas, NV 89101.
PRODUCTION: One 50-ton shipment yielded 70.6 ounces of Ag & 6.5%
~~XXXXX~~ Pb. Total production from the district from 1919-1948
is recorded as 274 oz Au, 2,359 oz Ag, 12,600 lbs. Pb, &
7,600 lbs. Zn. (NBMG Bull. 73)

County: Lincoln ⁽¹⁶⁹⁾ Item 4
Mining District: Freiberg
AMS Sheet: Caliente
Quad Sheet: Caliente 2° sheet
Sec. 20? T 1N R 57E
Coordinate (UTM):
North 4119880.0 m
East 622600.1 m
Zone 11

DEVELOPMENT: This is main working observed in the district. It is a small open pit consisting
of benched & blasted, east-facing slope drilled to 5' centers. Drill roads extend up
canyon & north & south of minesite along low slopes in area. South of open pit (in drainage)
is remains of leach pad. Stock piles of ore lie below open pit near road.

ACTIVITY AT TIME OF EXAMINATION:
Listed as active, heap leach, Ag mine for the years 1980-1982. In 1982, the mine employed 9
persons.

GEOLOGY: Open pit is developed in bedded carbonates of the Ordovician Pogonip Group. The
cut consists of two benches about 100-150' long (N-S direction) & 60-100' (total) width
(in E-W direction). Main rock type exposed in floor & west wall of cut is dark-grey,
fine-medium crystalline dolomite & dolomitic limestone. The rocks are fractured, faulted &
commonly bleached or marbelized. Fe-staining & pink(Fe) to white calcite veining is
ubiquitous. Some zones are finely brecciated, silicified & recemented by pink & white
calcite & quartz. Fe-rich veinlets (hematite) cut through host & carry pyrite, mostly
oxidized.

Beds of dolomite in the pit are highly fractured, but in general strike approximately
N-S (N10E) & dips 20° to the west. Several light-colored, siliceous aplite dikes (?)
cut the limestones at a high-angle to bedding (with N80E, E-W orientations). The dikes(?)
are irregular in shape. Oxidized, silicified & Fe-filled "veins" occupy steep fissures &
fractures throughout entire cut face. The "veins" consist of hydrothermally altered
wallrock (clay, silica & Fe). The strike & dip of an Fe-rich, fissure vein at the south end
of pit is N70E, with a steep inclination to the north. A few irregular-shaped, white
quartz veins cut through the sediments at the south end of the pit. The quartz is white to
clear in color, sugary to massive texture & contains fracture coatings & vugs of pink Feoxs,
in addition to minor oxidized pyrite. The wallrocks adjacent to the vein are notably
bleached & marbelized.

Sample 1765 came from an ore pile on the floor of the pit. The sample looks like
typical Ag ore in that it consists of bleached, clay & silica-altered limestone which is
characterized by pervasive Fe-staining. Most of the ore is oxidized, & gossany pods &
veinlets are common. A high-grade sample of brecciated calcite vein & gossan contains
pods of (argentiferous?) galena, oxidized pyrite, sphalerite, cerussite, minor chalcopryite,

~~REMARKS~~ anglesite? & rhodochrosite. Cerussite, malachite & unusual green crusts (AgCl?) coat
fracture surfaces. Sample 1766 is oxidized Ag ore from stockpiles below minesite.
Stockpile ore may have been derived from several locations within the district,
including the open pit.

Remarks: Samples 1765, 1766.

REFERENCES: NBMG Special Publications, MI - 1980, MI-1981, MI-1982,; NBMG Bull. 73.

EXAMINER: Bentz/Smith

DATE VISITED: 10/7/83