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McCOY DISTRICT

The McCoy mining district is located on the eastern flank of the northern part of the Fish Creek Range, approximately 30 miles southwest of Battle Mountain in Lander County, with mining activity confined to the northern part of T28N,R42E. Access to the district is from the west along good dirt roads from Nevada Highway 8A.

The McCoy mining district was formed in 1914 when Joseph H. McCoy discovered gold in the vicinity of what is now known as the Iron King Mine. No significant activity occurred until 1928 when high grade ore was discovered at the adjoining Gold Dome Mine and McCoy sold his claims to H. W. Boyer, who then leased the claims back to McCoy. By 1938, however, production at the mines had ceased and the town of McCoy was deserted. Interest in the district was revived in 1941 when high grade iron ore deposits were discovered at the Hancock and Uhalde-New World deposits in the southern part of the district. Mining after World War I and up to the present has been sporadic. There is currently ongoing surface and subsurface gold and copper exploration throughout the district. Total production for the district in gold and iron with minor amounts of lead, silver, and copper has been less than \$1 million, with the dollar value of iron far exceeding that of gold (Schrader, 1934; Stager, 1977).

The main part of the McCoy district is in a basin which opens to the east, in the low rolling hills of the Fish Creek Mountains, the site of an early Miocene volcano that produced the Fish Creek Mountain Tuff. These tuffs are separated from the Triassic Augusta Sequence by an angular unconformity (McKee, 1970). The mine workings are in carbonates and quartzites of the Cane Spring and the Osobb Formations. These sediments were gently folded into a south plunging anticline (Ferguson, Muller, and Roberts, 1951), intruded by Jurassic to Tertiary porphyritic diorite and granodiorite, and then overlain locally by Tertiary ash flow tuffs. The intrusive has been altered to a greenish-grey medium-grained

J. Tingley + P. Smith (1982) Mineral Inventory of Eureka. Shorshone Resource area: NBMB OFR 83-30.

granitoid, slightly speckled with ferromagnesium minerals, and stained with oxidized pyrite and hematite. The tuffs are locally altered to epidote and nontronite. The iron ores are replacement and contact metamorphic deposits (Schrader, 1934) consisting of bands, lenses, and pods of magnetite, hematite, and minor pyrite which replaced dolomite of the Osobb Formation. The ore runs approximately 70% iron. Gangue minerals include dolomite, calcite, quartz, apatite, and andradite (Schrader, 1934).

At the Hancock Mine, iron ore is mined from replaced dolomite with an overlying unconformable layer of nontronite that is in turn overlain by ashfall tuffs and alluvium. Within the small open pit are a prominent set of vertical fractures trending N25W. Further north is the Uhalde-New World Mine covering several acres of open pits. This area was being staked when it was field checked in November 1981.

The gold, which is relatively free, occurs in steeply dipping replacement deposits that strike northeast and run parallel with the axis of the range. The replacement deposits are irregular and occur along faults and fractures in the diorite and limestone. There were no observed veins or fissures associated with the deposits. The ore minerals include native gold, silver, cerargyrite, malachite, azurite, cerrusite, pyrite, chalcopyrite, and galena. The ore bodies range from small pods to large irregular masses.

The gangue is principally a mixture of silica (quartz, opal, jasper), iron oxides, and clay with some calcite, pyrite, epidote, and garnet (Schrader, 1934). The quartz, as described by Schrader, is hydrous silica, and grouped into "opalite ore", and "siliceous sinter". At the Gold Dome Mine, the gangue is a siliceous mass of partly altered, replaced diorite.

Schrader's description of the gold ores and their setting seem to describe a hot-springs type gold occurrence.

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