

## Dewey Copper Mine, Clark Mountains

16N 13E Sec. 05 SBM 35.50080000040 -115.60834000000

The Dewey mine (Hewett, 1956, no. 72; pl. 2) is located on the southeast side of the same ridge as the Copper World and about 1,000 feet southeast. The workings include two tunnels, of which the lower and most extensive is shown in figure 52 (reproduced below). As at the Copper World mine, the bedding of the Goodsprings dolomite strikes nearly east and dips 25°- 35° S. Also, the dolomite beds are intruded by several sills of fine-grained gray monzonite and are broken by faults that strike northeast. These later faults are offset by later faults that strike northeast. The northernmost drift which ends in monzonite shows five distinct and separable zones of alteration of the gray dolomite within a distance of 50 feet. The minerals formed by this process of alteration are so well developed and uncommon that specimens were collected for detailed study. This has been done by Jewell J. Glass of the U. S. Geological Survey (p. 69). Along another contact zone in the mine the gray dolomite is altered to a dark rock that contains black mica (phlogopite) and spinel. According to Dr. L. D. Godschall, 165 tons of copper in 100 feet of ore zone was mined from the south drift of this tunnel, 55 tons was added to Copper World ore and smelted, and the remaining 110 tons is on the dump at the smelter. (From Hewett, 1956, p. 138-139).

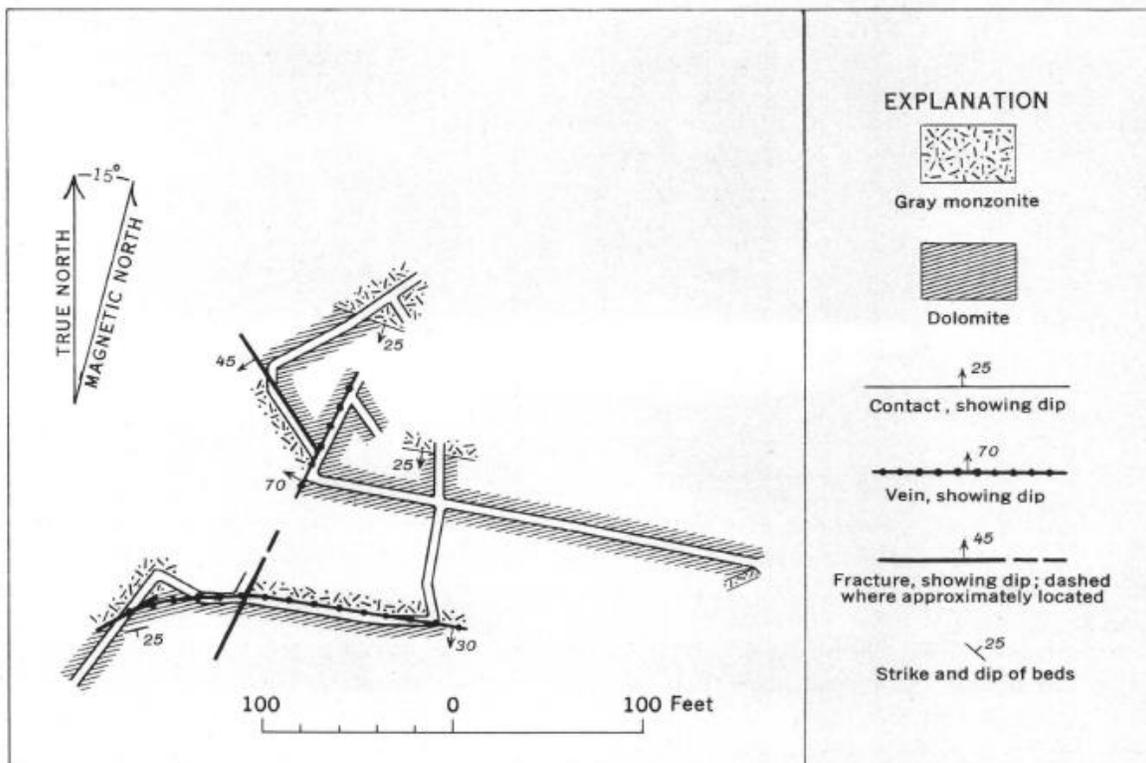
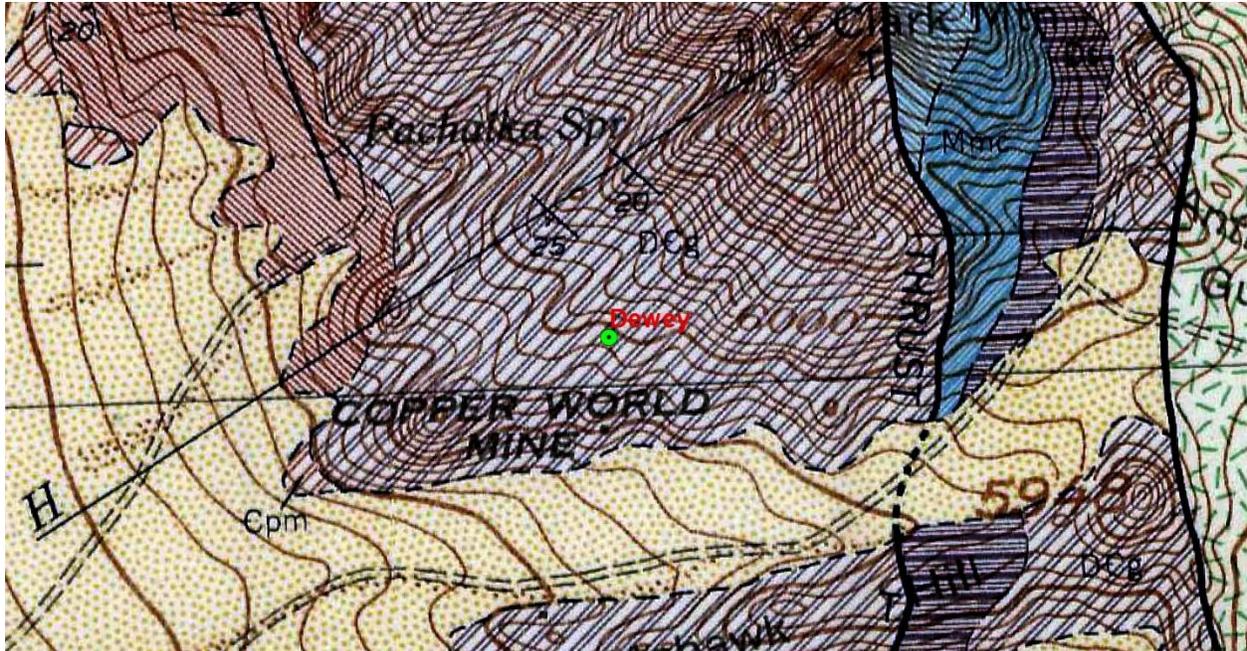


FIGURE 52.—Sketch map of tunnel, Dewey mine.

Figure 1. Sketch map of Dewey Mine tunnel. From Hewett, 1956, p. 138

The Dewey mine is hosted at the surface by Goodsprings dolomite.



The mine is northwest of the Copper World Mine

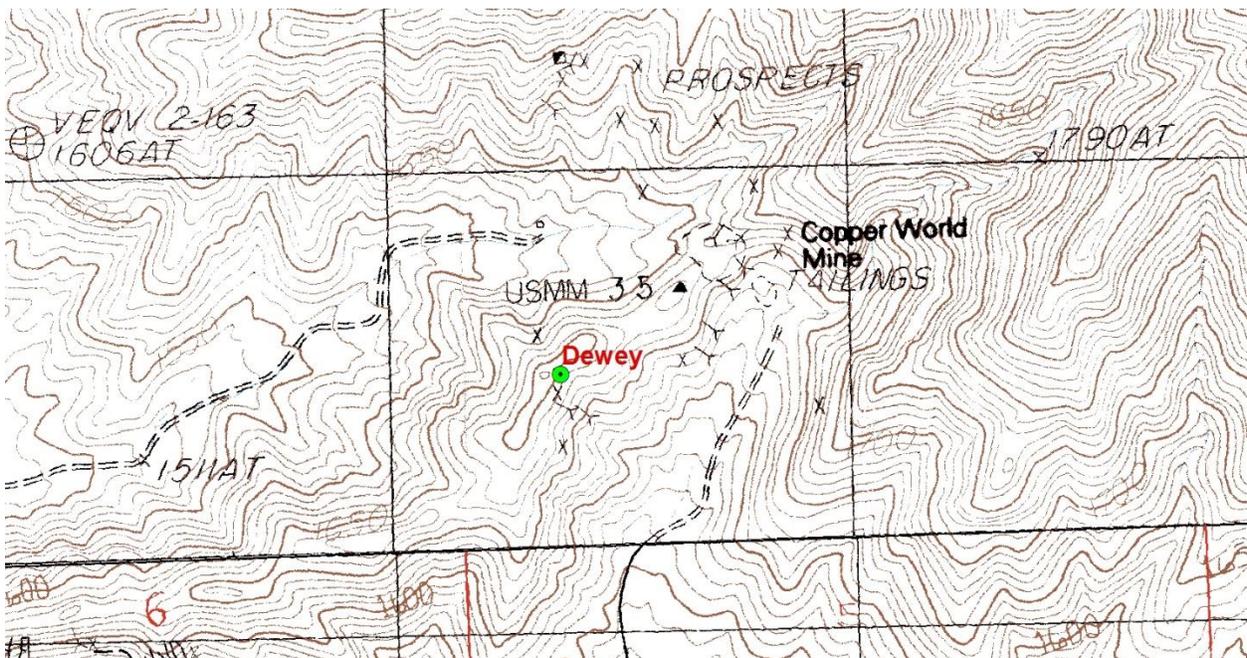


Figure 2. Topographic map of the Dewey and Copper World Mines. From USGS Ivanpah Quadrangle 1:24K.

Copper together with gold and silver have been produced from the Dewey, Copper World, Copper Commander, Lime Canyon, and the Keiper mines. Ore minerals at the Copper Commander, Copper World, and Dewey mines includes chalcocopyrite, azurite, malachite, and crysocolia in a limestone and garnet-epidote matrix. Mineralization occurs along the contact between the Teutonia Quartz Monzonite and Paleozoic carbonates as well as along irregular tongues of quartz monzonite and irregular bodies of garnet-epidote skarn within southwest dipping carbonate rock that borders the pluton. This type of

mineralization extends westward to within a few 100 feet of the Lime Canyon mine, which is a skarn-related hydrothermal mineral deposit. Ore minerals in the Lime Canyon and Keiper mines consists of galena, sphalerite, chalcopyrite, pyrite and their oxidation products which includes secondary zinc and copper oxide minerals and iron oxides. The quartz monzonite near the Lime Canyon mine has been sericitized and chloritized and contain sepidote and garnet within a large area surrounding the mine but has little sulfide mineralization. (Bezore and Joseph, 1985, p. 42-43).