

## Mammoth Copper Mine, Clark Mountains

17N 12E Sec. 23 SBM 35.5514000020 -115.6705400000 (South Prospect?)  
17N 12E Sec. 14 SBM 35°33'31.4270N -115°40'12.14"W (North mines)

The Mammoth mine (Hewett, 1956, no. 57, pl. 2) lies at the head of a gulch that rises in a small mountain about 5 miles northwest of Clark Mountain. (From Hewett, 1956, p. 136).

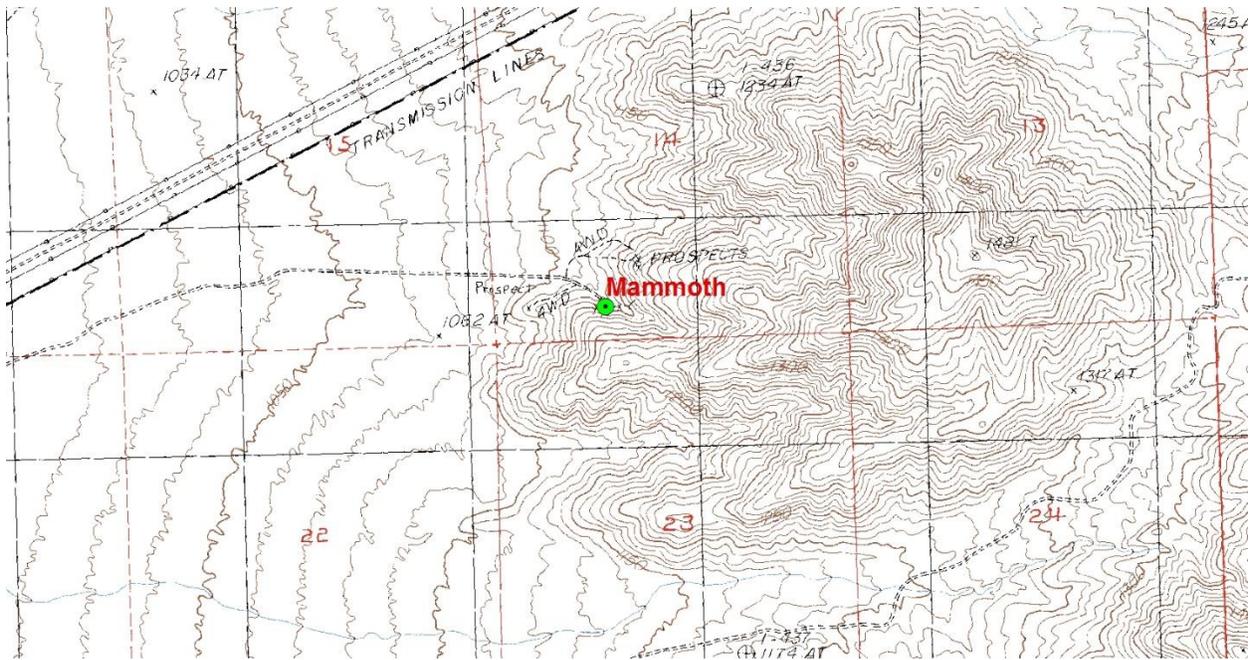


Figure 1. Topographic map of the Mammoth Mine. USGS Ivanpah quadrangle, 1:24K.

This mine lies along a fault in PreCambrian Prospect Mountain Quartzite (Hewett, 1956, Plate 1). The Mammoth Mine is an isolated copper deposit which occupies fractures in hydrothermally altered Noonday dolomite. Mineralization includes chalcopryite, malachite, azurite, chrysocolla, auricalcite along with calcite, quartz, hematite, limonite, clay and possibly epidote, occurring in high angle faults and fractures beneath a thrust fault. There is some silicification and argillic alteration present adjacent to the mineralized veins. (Bezore and Joseph, 1985, p. 46)

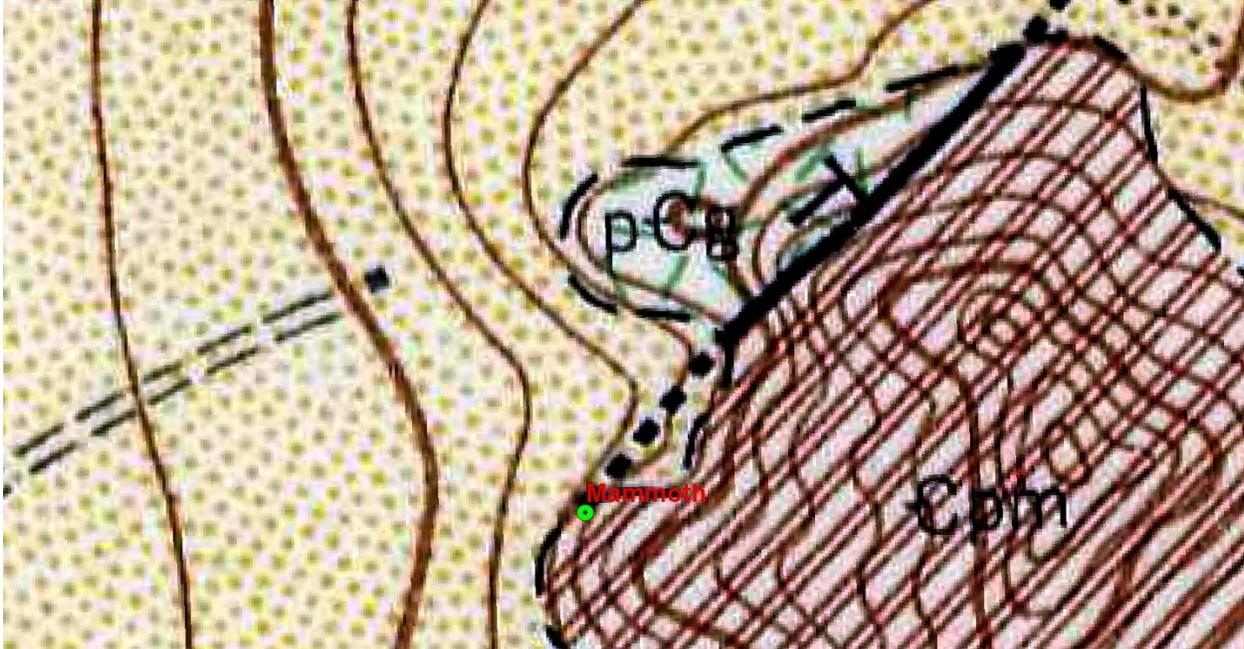


Figure 2. Geologic map of the Mammoth mine and surrounding areas. From Hewett, 1956, Plate 1.

The Mammoth mine was worked in a small way by the owner, W. D. McQuen, from 1906 to 1929. From 1916 to 1918, it yielded about 100 tons of ore that contained 22 to 25 percent copper. During the next 11 years it yielded 38 tons of ore that contained 16 to 28 percent copper. Both the gold and silver in these shipments were low. The mine includes three tunnels on the north and south sides of the gulch; the longest tunnel contains about 150 feet of drifts. The aggregate footage is about 400 feet. The area is one of complicated structural detail. A tear fault, along which schistose granite gneiss is thrust over the basal section of the Cambrian system, trends northeast just north of the mine (Hewett, 1956 fig. 18). The longest tunnel explores the contact of the Noonday dolomite on this gneiss. The minerals in the ore and on the dump include malachite, azurite, chrysocolla, auricalcite, alunite, limonite, and quartz. Unweathered vein material has not yet been found; before weathering it probably contained largely pyrite, chalcopyrite, and quartz. Alunite and the copper minerals are products of weathering. (From Hewett, 1956, p. 136).