

## Henry Gold Mine, Shadow Mountains

16N 13E Sec. 16 SBM 35.47810000010 -115.58334000000

Several mines have been opened on the south slope of Shadow Mountain (now Mohawk Hill). At least one, the Henry mine (Hewett, 1956, no. 11- 12, pl. 2) was opened as early as 1895 (Tucker and Sampson, 1943). This area is within the contact aureole which extends along the margins of the Teutonia Quartz Monzonite and has yielded production in the past. The northern part of the area, which includes the Yucca Queen and Henry mines, is a skarn-related hydrothermal replacement deposit. It contains argentiferous galena, pyrite, malachite, azurite, cerussite, and manganese oxide in 2 to 8 foot wide veins trending northwest and dipping to the southwest. Mineralization appears to closely follow the contact between carbonate rock and Teutonia Quartz Monzonite. An alleviated area that is underlain by Goodsprings Dolomite in proximity to the Teutonia Quartz Monzonite is included in the area. (Joseph, 1984, p. 44)

The Henry Mine is contained in the Mesquite Thrust Fault. Goodsprings dolomite (DCgu) is in the hanging wall of the Mesquite Thrust, to the west. Valentine Limestone Member of the Sultan Limestone Formation (Dsv) is in the footwall, to the east (Evans, 1971).

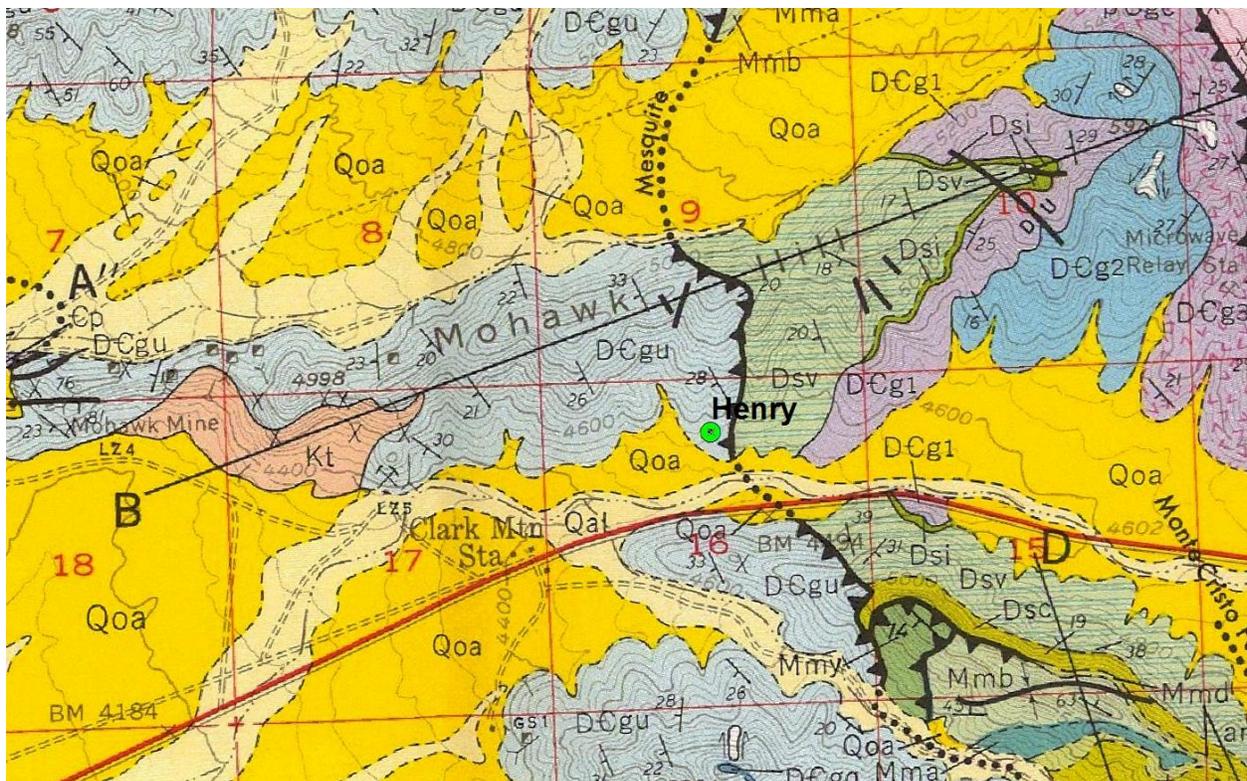


Figure 1. Geology of the Henry Gold Mine and surrounding area. From Evans, 1971.

The principal exploration at this mine, a tunnel about 750 feet long, lies in a ravine on the southeast slope. There are also three shallow shafts. Two kinds of rock make up most of Shadow Mountain. The most abundant is a pale-gray granite gneiss which is largely orthoclase, quartz, and biotite. Intruded into this are belts of dark-greenish syenite gneiss, which is largely orthoclase with some hornblende and a

little quartz, and dikes of aplite intruded into the gneiss. The lamination of the gneiss strikes north and dips  $45^{\circ}$  to  $60^{\circ}$  E. The Henry mine explores a quartz vein that lies between granite gneiss below and syenite gneiss above. The strike of the vein is N.  $10^{\circ}$  W. and the dip is  $50^{\circ}$  E. The vein has been stoped as much as 100 feet upward from the tunnel and along it or 300 feet. As the vein is not stoped where it is less than 8 inches wide, much of it must have been wider. In addition to quartz, the vein shows limonite, chrysocolla, and vanadates, but no sulfides. In recent years the mine has been an intermittent source of small shipments. From 1913 to 1919, there is record of production of 35 tons of ore that contained about 2.90 ounces of gold to the ton and a little silver, copper, and lead. (From Hewett, 1956, p. 120).