



Arizona Rocks 56

Text and photos by Ray Grant

Jerome is an old mining town that has remade itself into a tourist destination. It was a rich mining district located in 1876 (although there are reports of the Spanish and Native Americans mining in the area before that). By the 1950s it was largely mined out with just some small-scale operations after that. The production numbers for the mining district are gigantic: over 3.5 billion pounds of copper, over 57 million ounces of silver, 1.5 million ounces of gold, and almost 100 million pounds of zinc.

The geology of the deposits is really interesting, as it is not like all the other big copper deposits in Arizona. The metals in the mines at Jerome were deposited on the ocean floor by black smokers. Black smokers are present in the ocean today and are depositing metals in potential ore deposits on the ocean floor. These ocean floor deposits are not economical at present because of the cost of mining them under several miles of ocean.

Two billion years ago there was no Arizona only ocean existed here. Starting about 1.8 to 1.7 billion years ago Arizona was added to North America, and at Jerome the ocean floor and the metal deposits were incorporated into the continental rocks. The Jerome State Historic Park at the Douglas Mansion in Jerome has good exhibits explaining the geology of the ore deposits and I recommend it as a place to visit. Also, stop at the Audrey Head frame Park on your way to the Douglas Mansion.



Jerome State Historic Park in the Douglas Mansion



Model in the Museum showing Jerome and all the mining under ground

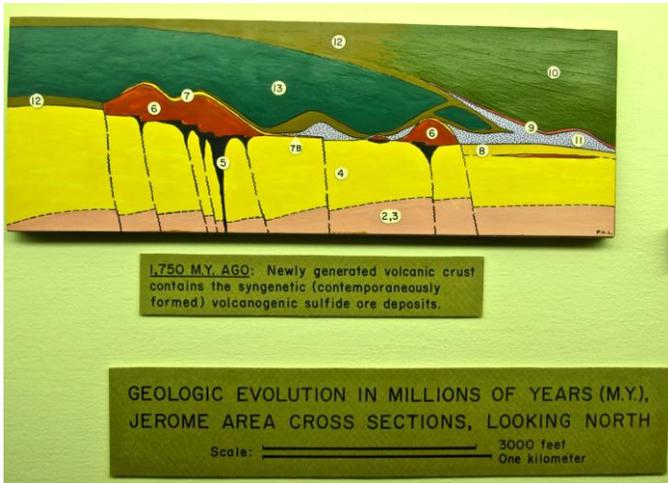


Minerals on exhibit in the Museum



"Black Smoker" Sulfide Column (GA). Virtually identical to modern counterparts observed forming on today's sea floor, this 1,750 million year old specimen was collected in 1988 by R.McGeehan and P.A.Lindberg from exposed massive sulfide in United Verde open pit.

Black Smoker from the United Verde Mine in the Museum that is similar those forming in the ocean today



Part of the exhibit on the geology of the Jerome ore deposits



This shaft in the Head frame Park is 1,900 feet deep, to get to the ore under Jerome.



Audrey Head frame Park in Jerome



At the Head frame Park walk out on the glass plate and look down.