

Pumpkin Hollow mine: Resurrection of copper mining in the Yerington district

Greg French, Nevada Copper, Yerington, USA [vs United States?]

Copper was discovered in Nevada's Yerington district in 1865 and followed with mining at the Bluestone mine. Additional mines came into production at the turn of the century, mining mainly high grade oxide skarns.

Anaconda conducted open pit mining and milling operations at the Yerington open pit from 1952 to 1978 and ceased operations in 1978 due to low copper prices. The next uptick in mining happened in the 1990s when Arimetco pursued leaching operations for several years on the MacArthur oxide Cu deposit.

From 2000 to present there was renewed interest in the district. Quaterra Resources Inc. acquired the Yerington mining district assets from bankrupt Arimetco. Entree Gold acquired the Ann Mason deposit and Mason Valley Properties consolidated the Mason mine skarns. Across the valley from the older mine copper skarns and porphyry deposits is the buried Pumpkin Hollow deposit. US Steel discovered Pumpkin Hollow in the 1960s while looking for magnetite deposits in the western US. Pumpkin Hollow is dominated by Fe-Cu skarns with abundant calcic-sodic alteration.

The property has a long history of continued exploration and resource expansion since the US Steel discovery. Anaconda leased the property and located high grade skarn breccia-hosted copper mineralization. In the 1980s, Conoco used skarn zoning and the marble-front model to verify large high-grade underground copper resources. This was later followed by exploration programs by Plexus, Cyprus and Taurus.

In 2006, Nevada Copper acquired the property and started drilling and expanding the resource. Integrating the large amount of previous drill data and operators' observations, the district model and a "critical mass" of new drilling has developed a new working geologic model for exploration.

Also in the 2000s the academic world recognized fingerprints of the IOCG deposit model at Pumpkin Hollow which explains the extreme abundance of magnetite and precious metals. Nevada Copper is currently deepening the 24-ft diameter vertical production shaft, commenced sinking a 12-ft diameter ventilation shaft, and is constructing a 5,000 ton per day flotation mill. Since discovery over 1.2 million feet of drilling has been carried out on the property. The open pit reserve is 572 million tons grading 0.47% copper equivalent containing 5.0 billion pounds of copper. The underground reserve is 23.9 million tons grading 1.74% copper equivalent containing 759 million pounds of copper of silver.

Greg French

Geology of the Resolution Cu-Mo deposit, Superior, Arizona