

## A NEW CINNABAR LOCALITY IN WASHOE COUNTY, NEVADA

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The presence of cinnabar in altered Pleistocene alluvial deposits was noted by the writer and L. H. Beal of the Nevada Bureau of Mines during a recent examination of a sulfur prospect situated in the northern Lake Range, Washoe County, Nevada. The general location of the area is shown in figure 1. Figure 2 is a topographic and geologic sketch map of the occurrence, on a scale of 1:34,300. No previous published report on the occurrence of cinnabar in this area exists insofar as the writer is aware.

The cinnabar occurs in moderately to highly altered sands and gravels of Pleistocene age and is associated with native sulfur, gypsum, opal, chalcedony, quartz, kaolinite, sericite and other alteration minerals. The altered zone is aligned in a north-south direction and is almost certainly fault controlled. It can be traced for over two miles along its' strike and in places, has an exposed width in excess of 100 feet. The altered zone is partially covered by a thin mantle of later alluvial and lacustrine deposits. Cinnabar was observed at 2 localities in the altered zone and a mercury soil anomaly was detected at a third locality (see Figure 2 for location). These localities were the only ones examined in the altered zone.

The cinnabar occurs as very fine-grained particles disseminated through both silicified and non-silicified phases of the altered rock and as encrustations and films coating fractures and open spaces. Much of the altered rock is impregnated with native sulfur. The distribution of the cinnabar appears to be approximately coincident with that of the native sulfur, but there are zones high in sulfur which seem to be low in cinnabar and other areas which contain visible cinnabar and little to no sulfur. Physical exploration of the occurrences is limited to several shallow pits



and trenches made to explore the native sulfur mineralization. The economic potential of the cinnabar occurrences in this area can only be determined by physical exploration.

The mercury mineralization belongs to the sulfurous type of quicksilver deposit as defined by Bailey and Phoenix (1944, pg. 14). The altered zone almost certainly represents the deposits of extinct hot springs. Similar occurrences of mercury are found in the Sulphur District, Humboldt County, Nevada and at the Sulphur Banks Mine, Clear Lake District, Lake County, California.

Data supplied by the U. S. Bureau of Mines indicates that claims were located on the native sulfur occurrences in 1909 and again in 1931. Claims were again located on the sulfur occurrences in 1951 by H. Hawton and Ed Hand of Reno, Nevada, the last known claimants. The present ownership status of the property is unknown to the writer.

Reference Cited:

Bailey, E. H. and Phoenix, D. A., 1944, Quicksilver deposits in Nevada: Nevada Univ. Bull., v. 38, no. 5, 206 p.





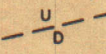



Figure 1



## EXPLANATION

Triassic or Jurassic	Tertiary	Miocene to Pliocene	<div style="border: 1px solid black; padding: 2px; text-align: center;">Qlu</div>	Lake Lahontan deposits, undifferentiated; includes sand, silt, clay, gravels, and reworked alluvial fan detritus plus small areas of Recent alluvial and playa deposits.
			<div style="border: 1px solid black; padding: 2px; text-align: center;">Qoal</div>	Older alluvium; Alluvial fan detritus, sand, silt and gravel, poorly sorted.
	Quaternary	Pleistocene	<div style="border: 1px solid black; padding: 2px; text-align: center;">QTg</div>	Terrace gravels; Pre-Lahontan alluvial deposits, clay, silt, sand and gravel, highly dissected.
			<div style="border: 1px solid black; padding: 2px; text-align: center;">Tcg</div>	Conglomerate and sandstone; pebble to cobble conglomerate, grit and sandstone. Clastic material derived largely from metamorphic rocks.
			<div style="border: 1px solid black; padding: 2px; text-align: center;">Tst</div>	Silicic sediments and tuffs; fine-grained silicified sediments and tuffaceous sediments intercalated with rhyolitic tuffs. Extensive hydrothermal alteration including argillization and silicification present in this unit.
			<div style="border: 1px solid black; padding: 2px; text-align: center;">MZms</div>	Metasedimentary rocks; Silvery-gray phyllite and quartzite.

## SYMBOLS

- 
Fault, approximately located, showing relative displacement.
- 
Altered zone, approximately located, width of line not significant.
- 
Known occurrence of cinnabar, approximate location.
- 
Known mercury geochemical anomaly, approximate location.



