also occurs as a heterogeneous mixture in psilomelane. Neither wolframite nor scheelite have been found in the ores.

197.5 Pinson Mining Co's PREBLE Mine (fig. 10, 11) is visible in the middle ground in front of the small pointed hill on the left. Sub-microscopic gold is disseminated within carbonaceous shales and silty limestones of the middle member of the Cambrian Preble Fm. Altered granodiorite dikes and small sills are associated with the gold mineralization. Ore occurs along a broad shear zone parallel to bedding, which strikes northeasterly and dips 30 degrees to the southeast. The shear zone is part of the Getchell Fault System, a series of sub-parallel, en echelon faults and broad shear zones that bound the eastern flank of the Osgoods and control gold mineralization at Pinson, Getchell and probably at Chimney Creek.

Gold is strongly associated with replacement quartz. Silicification occurs within the ore horizon and extends out laterally from it. Arsenic and lesser mercury, barium and antimony are associated with the silicification and gold mineralization. The ore is oxidized to a depth of 200 ft, below which mineralization is highly refractory. (Kretschmer, 1987)

Oxide reserves as of Jan. 1, 1986 were estimated to be 80,000 tons of milling ore grading .242 opt gold and 1,385,000 tons of heap-leaching ore averaging .054 opt gold. Low-grade ore is leached on site; high-grade ore is milled at Pinson.

198.5 As the highway begins to climb towards Golconda Summit the first roadcuts are in the Cambrian Preble Formation (both sides of the highway). When the highway again curves to the southeast, it crosses the general trace of the Iron Point thrust fault; upper-plate rocks (to the east) are Permian-Pennsylvanian Antler Peak Limestone. Beyond the curve, the trace of the Golconda thrust fault is crossed; upper-plate rocks (to the east) are chert and shale of the Permian-Pennsylvanian Pumpernickel Formation. Areas of alteration in the Pumpernickel are related to Cretaceous quartz diorite dikes that cut the older rocks. Scattered copper mineralization is found in some of these altered zones, and considerable prospecting has been done south of the highway between here and the summit.

200.0 Golconda Summit.

201.8 Eastside of Golconda Summit. Roadcut drops back into the lower plate of the Iron Point thrust (to the east, lower-plate Cambrian Preble Formation).

203.9 EXIT 203 IRON POINT. Colorful alteration on both sides of the highway occurs in shale and chert of the Ordovician Valmy Formation. The Valmy outcrops north of the highway have been explored for vanadium. Black shale here contains barium, copper, nickel, silver, vanadium, and zinc. Highest concentrations of metal occur in a stratigraphic zone about 35 feet thick that has been traced for some 1,000 ft along strike to the north (U.S. Geological Survey and Nevada Bureau of Mines, 1964). Silver prospects occur north of this zone at the Silver Coin Mine (head frame and old buildings to north). In the mid 1970's, deep drilling was done in this area to explore for copper-molybdenum mineralization in skarns associated with small quartz diorite intrusive bodies that underlie the district. A large area here shows anomalous values of arsenic, antimony, and mercury, and there has been exploration for sediment-hosted gold. The reclaimed drillpads on the left side of the highway are in hematite-stained thin-bedded limestone of the middle part of the Cambrian Preble Formation.

Figure 10. After Kretschmer, (1987)

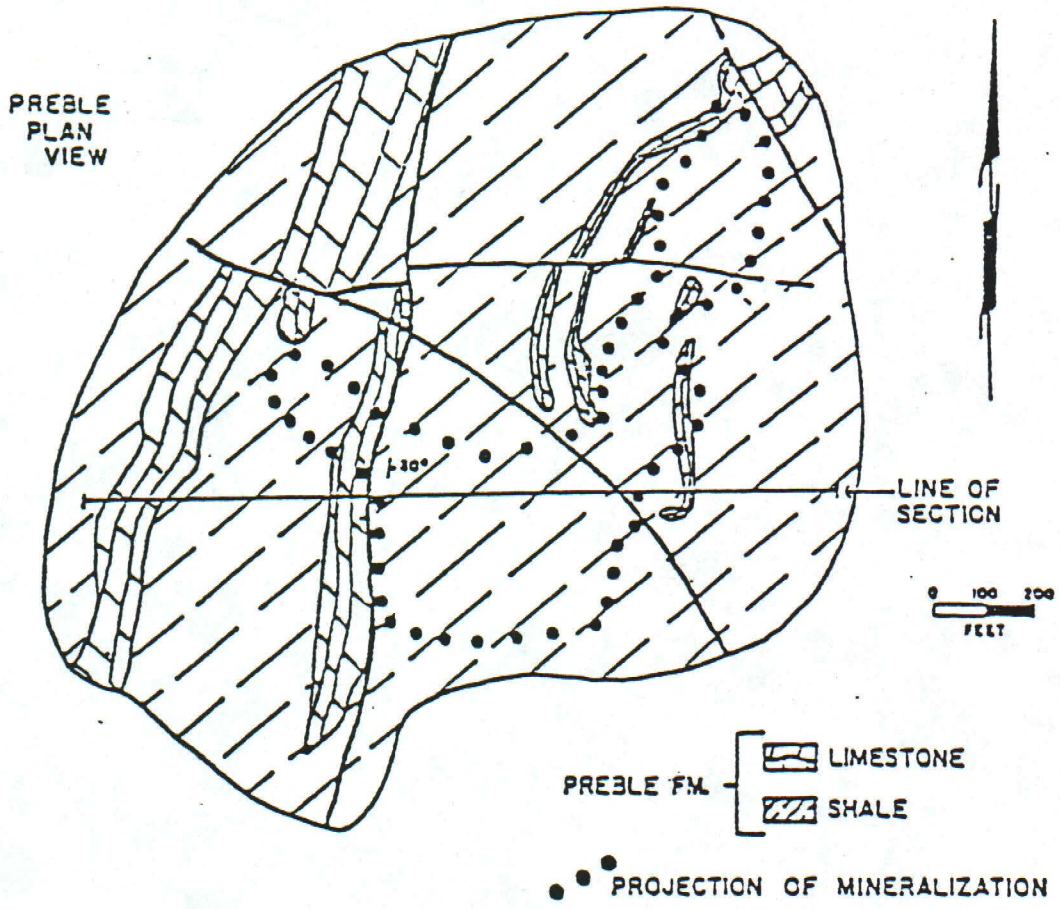
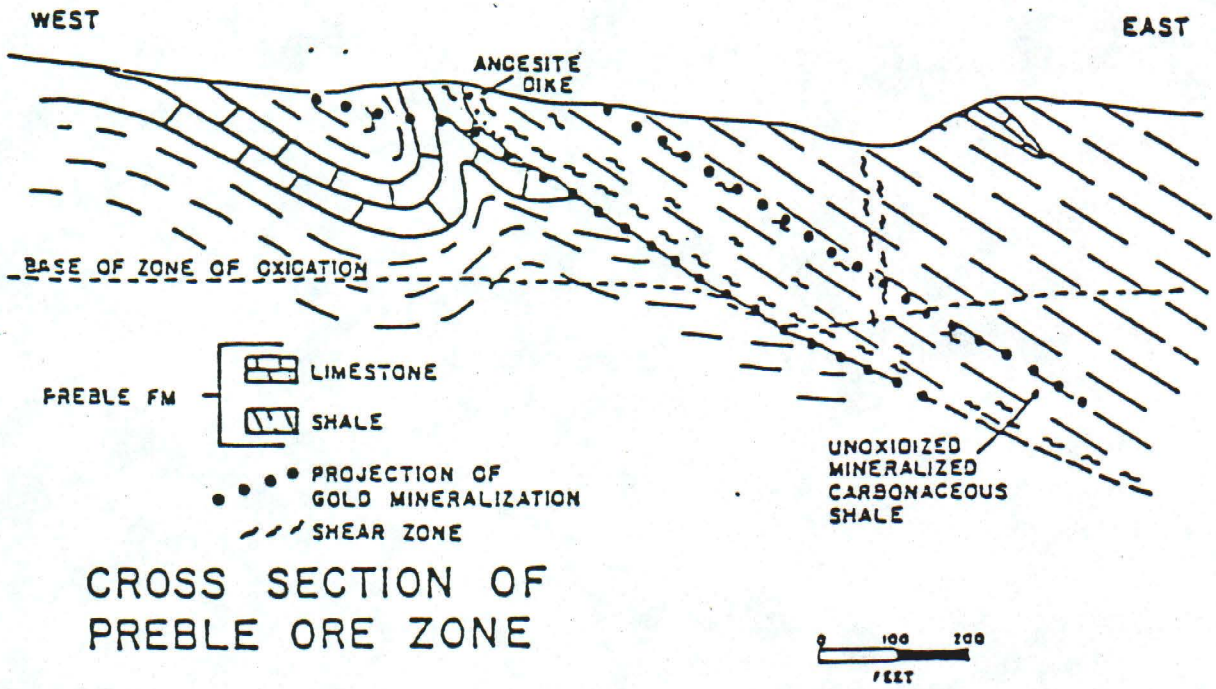


Figure 11. After Kretschmer, (1987)



Cross section of Preble ore zone.

GEOLOGICAL SOCIETY OF NEVADA

1988 FALL FIELD TRIP GUIDE BOOK

GOLD DEPOSITS OF NORTH CENTRAL NEVADA

Marigold
Cove
McCoy
Rain
~~Suprise~~
Surprise

LARRY GARSIDE
NEVADA BUREAU OF MINES AND GEOLOGY
UNIVERSITY OF NEVADA
RENO, NEVADA 89557-0088

SPECIAL PUBLICATION #8
September 22-24, 1988