

WILD HORSE DISTRICT

Item 4

LOCATION

The Wild Horse district is located in the southern end of the West Humboldt Range in T25-26N, R31-32E, Pershing County. The district is accessible from dirt roads in Buena Vista Valley or the Humboldt River Valley.

HISTORY

Prospects were discovered in the district in 1905-06 but no properties were developed until World War I when the Long or Long Lease and Green mines were located. Little production resulted until the 1930's when the Green Mine was worked from 1936-37, 1952-54 and 1962-67. The Long Lease Mine produced tungsten in 1942-44 and 1952-54.

GEOLOGIC SETTING

The West Humboldt Range in the Wild Horse district is composed of Triassic and Jurassic metasedimentary rocks, principally shale, argillite, sandstone, and minor limestone, which is intruded by gabbro of Jurassic age and granitic rocks of Cretaceous age. The Mesozoic rocks are complexly folded and faulted and are unconformably overlain by Tertiary sedimentary and volcanic rocks.

ORE DEPOSITS

The Long Lease Mine is located at the contact between porphyritic granite and Mesozoic hornfels and marble. Skarns have developed along the intrusive contact. The skarns consist of several variants, pyroxene, garnet, amphibole, and garnet-epidote. All contain magnetite, minor sulfides, now largely oxidized and variable amounts of yellow fluorescing scheelite. Approximately 200 tons of scheelite-bearing skarn have been mined. The skarn occurs as lens shaped pods up to 3 m wide adjacent to the granite contact. The granite is weathered to gneiss and is cut by aplite-pegmatite dikes.

The Green Mine, and another similar unnamed deposit a mile north of the Green Mine, are located on mineralized fault zones in chloritized gabbro. The Green Mine is located on a NE trending zone marked by several meter of iron-stained argillized gabbro. Lenses and pods of quartz with jamesonite and pyrite occur in the fault zone. The sulfides are partially oxidized to bindheimite and iron oxides. The deposit has produced 46 tons of antimony. It is currently idle.

The other deposit is located on E-W to NE trending fault zones in gabbro. The faults are marked by zones of brecciation, bleaching and silicification. Lenses within the fault zones contain pyrite, jamesonite, and arsenopyrite. Much of the ore is oxidized and abundant bindheimite after jamesonite is present in the ore. The deposit is developed by a

small open pit. The area was explored by core drilling approximately 10-15 years ago.

The other significant mineral resource in the district is the Piute iron deposit (Johnson, 1977). The Piute deposit occurs at depths of over 800 feet in Buena Vista Valley. The host rocks are metamorphosed volcanic and sedimentary rocks. "Very large" quantities of ore containing more than 20 percent iron are present in the deposit. The main ore mineral is magnetite.

GEOCHEMISTRY

Sample results not yet available.

SELECTED REFERENCES

- Johnson, M. G. (1977) Geology and mineral deposits of Pershing County, Nevada: Nevada Bureau of Mines and Geology Bulletin 89.
- Lawrence, E. F. (1963) Antimony deposits of Nevada: Nevada Bureau of Mines and Geology Bulletin 61.