

S15, 36N, 40E

Golconda

(Humboldt Co.) (128)

Item 14

2020 0014

The Golconda tungsten-bearing manganese deposit of the Nevada-Massachusetts Co., is situated at the foot of the Edna Mountains, 3 miles southeast of Golconda.

Rocks in the area according to E. C. Harder,<sup>5/</sup> are both igneous and sedimentary. The igneous rocks are designated as granite, propylite, rhyolite, and basalt. The sedimentary rocks consist of shales, limestones and quartzites that strike northwest and dip at angles of 70° to 80° NE into the hill.

Near the foot of the mountains 2 small areas of horizontally bedded tufa rests unconformably on nearly vertical beds of shale.

In the tufa areas, the tungsten-bearing manganese deposits occur in nearly flat beds of varying thickness overlain with a hard calcareous cap. The deposit was exposed by several large irregular pits along a northeast-southwest line. Thickness of overburden varies from a few feet to 40 feet. The ore mined was of a clayey nature varying in color from black to rust, depending on the iron and manganese present. Mineralization is erratic, and the tungsten content varied from 1 to 7 percent  $WO_3$ , with a possible average metallic tungsten content of 2.2 percent.

The tungsten minerals are so intimately associated with iron and manganese that they have not been isolated. Consequently the ore cannot be detected by lamping with an ultra-violet light, and is not amenable to conventional gravity concentration.

An unsuccessful attempt was made to beneficiate the ores by roasting with soda-ash, salt, and coal. The main reaction desired during sintering is the formation of water soluble tungstate, which when further treated would result in a marketable tungsten product.

The operation was not successful and the property was shut down in 1943.

<sup>5/</sup> Harder, E. C., Manganese deposits of the United States, U.S. Geo. Sur. Bull. 427, pp153-157, 1910

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folded and broken limestone. The tungsten content is less than 0.1 percent  $WO_3$ .<sup>5/</sup>

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