

Excerpt from: Frey, Eugene. Hartville Iron District, Platte County, Wyo. [Washington, D.C.]: United States Bureau of Mines, 1947.

R.I. 4086

LOCATION AND ACCESSIBILITY

The Hartville iron district is situated in the Hartville mining district in Platte and Goshen Counties, Wyo., approximately 4 miles northwest of the town of Guernsey (fig. 1). The area is about 90 miles north of Cheyenne, Wyo. The district is served by the Chicago, Burlington & Quincy Railroad and the Colorado & Southern Railroad. Improved State Highway 26 passes through Guernsey, and improved highways lead from Guernsey throughout the district. However, some of the old roads to nonoperating mines need repairing.

PHYSICAL FEATURES AND CLIMATE

The Hartville iron district is in a region of comparatively moderate relief. Erosion has dissected the plateau, and the intermittent streams have formed narrow gulches and, in places, wide valleys. The elevation varies from 4,360 feet at Guernsey to a maximum of 6,000 feet in parts of the uplift. The climate is semiarid, and summers are hot, with rain storms. The winter temperature drops below zero for short periods. No water is available in the area but must be hauled in for core-drilling operations.

HISTORY AND PRODUCTION

In the past, the soft hematite ore of the Hartville iron district was utilized for war paint by the Indians. From 1880 to 1887, copper ores were mined in the district. Exhaustion of the copper deposits led to an iron-prospecting period extending from 1888 to 1897. Productive iron mining began in 1898 by the Colorado Fuel & Iron Co. and has continued to date.

Most of the production from the Hartville iron district has been obtained from two mines - the Sunrise and Chicago - which were purchased by the Colorado Fuel & Iron Co. Annual production from the district has increased from approximately 30,000 long tons in 1898 to over 814,000 tons at present (1946). The total production has been utilized at the steel mills at Pueblo, Colo.

DESCRIPTION OF DEPOSIT

The Hartville iron district forms the large portion of the Hartville iron range. The steeply dipping pre-Cambrian rocks are overlain by flat-lying or gently dipping carboniferous and Mesozoic sediments, as well as rocks of Tertiary and recent age (fig. 2).

The country rock of the ore is schist and an impure flint stained by either limonite or hematite and evidently a relatively shallow alteration product of the schist. The red-ore deposit of the Hartville iron district mines occurs in lenticular bodies of varying thickness, enclosed in a schist formation, immediately above the uppermost limestone of the older pre-Cambrian series. This limestone swings easterly to Whalen Canyon, where it is covered by alluvium. A thin shell of siliceous, iron-stained schist separates the ore from the underlying limestone. All indications show that the iron deposit of the Hartville iron district is but a replacement of the schist, since no hard-and-fast line can be drawn between unaltered schist, iron-stained schist, siliceous ore, and high-grade ore.