

I.C. 7022

Pumicite

Beds of pumicite occur about 1 mile east of Palisade, between mileposts 527 and 528 on the main line of the Southern Pacific Railroad. The principal deposits, covered by three unpatented claims, are owned jointly by Leo Lucey of Palisade and S. T. Edwards of Winnemucca, Nev., who discovered them several years ago.

The pumicite occurs in stratified beds ranging from 8 to 30 feet in thickness and dipping, on an average, 10° to the northwest. For the most part, the beds are overlain either with detritus or volcanic ash, the latter, in places, tightly cemented. Where the pumicite is exposed, it is composed almost entirely of fine grains of silica that are slightly coherent and uniform in size and texture. Analyses made by Abbott A. Hanks, Inc., of San Francisco, indicate that the material contains 92.4 to 93.6 percent silica.

The pumicite is probably suitable for the manufacture of household cleansers, mechanics soap, or other uses where a mild abrasive is desired. The beds can be mined cheaply, and the transportation facilities are unusually favorable, since the main line of the Southern Pacific runs within a few hundred feet of the principal bed.

Iron Ore

A deposit of iron ore occurs in the east side of the Cortez Range, about 20 miles south of Palisade and 4 miles east of the Goodfellow Ranch. The deposit was discovered by Amos Plummer about 1903 and shortly after it was acquired by M. L. Requa of San Francisco, who held the ground until several years ago under the name of the Amarillo Iron Co. Property consists of seven patented claims now owned by Eureka County for delinquent taxes. Development includes an adit that is caved near the portal. Iron ore has never been produced commercially.

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MOUNT HOPE DISTRICT

The Mount Hope district is on the southeast slope of Mount Hope at the south end of the Roberts Range, 23 miles by automobile road northwest of Eureka. Mount Hope station, on the Eureka-Nevada Railroad, is less than 1 mile east of the principal property in this area. Zinc ore was discovered here by charcoal burners in the '70s, but very little prospecting was done until the early '90s, when Thomas Wren, a prominent figure in early-day mining at Austin and Eureka, did considerable development work. The zinc ores could not be exploited profitably at that time, and there is no record of any production. About 4 years ago, the principal claims were prospected and purchased by the Universal Exploration Co. There was no activity in the district in 1937.

Universal Exploration Co.

The Universal Exploration Co., a subsidiary of the United States Steel Corporation, owns 13 patented claims. About 5 years ago the company acquired an option to purchase a group of claims from the Thomas Dixon estate. The ground was prospected by churn and diamond drilling in 1933 and 1934, and the results of this work were sufficiently favorable for the company to purchase the property. Additional claims were acquired by location.

Development consists of several adits, the longest about 900 feet, and other workings totaling about 3,500 feet. There is no usable equipment on the property.

Ore consists chiefly of sphalerite, a little galena, and considerable pyrite occurring as replacement deposits in a sedimentary formation. It is said that the ore contains considerable cadmium.

Morrison Group

A group of six unpatented claims owned by Louis E. Morrison, 420 Sackett Ave., Salida, Colo., adjoins the Universal Exploration Co. property on the west and the south. Development consists of three shallow shafts, the deepest of which is about 50 feet, and other surface workings, totaling in all about 200 feet. This property is in the prospect stage of development.

SAFFORD DISTRICT

The Safford district is in Safford Canyon on the west slope of the Cortez Range, about 10 miles by automobile road westerly from Palisade, Nev. The first discovery of mineral in this area was the West iron deposit, probably found by surveyors employed to map a railroad route from the Mississippi Valley to the Pacific coast.^{29/} This iron deposit is mentioned by geologists of the Fortieth Parallel Survey.^{30/}

The Onondaga silver mine was discovered by Benjamin Safford, after whom the district was named, in August 1881, and the Zenoli mine by Gabriel Zenoli and Francisco Thoma in 1883. From the viewpoint of past production, the foregoing properties are the principal ones in the district. From time to time a number of other claims have been located in this area, but their development never reached beyond the prospect stage.

The production of iron ore from the West mine for use as a flux in smelting operations in Salt Lake Valley has been about 300,000 tons. The production of other metals, chiefly silver, from the Onondaga and Zenoli mines has been about \$200,000. In recent years mining activity in this region has been confined to small-scale operations.

^{29/} Browne, J. Ross, Mineral Resources of the Pacific Slope: D. Appleton & Co., New York, 1869, p. 225.

^{30/} Hague, Arnold, and Emmons, S. F., Exploration of Fortieth Parallel: Vol. 2, 1877, pp. 585-586.