

capacity of 25 tons per day, but, due to the softness of the ore, the maximum capacity is 38 tons. Mill equipment includes a jaw crusher (8 by 10 inches), a Marcy ball mill (42 inches by 5 feet) in closed circuit with a Dorr simplex classifier, a Clark-Todd amalgamator between the ball mill and the classifier, an amalgamation plate, and a Wilfley concentrating table. Power for ~~milling~~ is furnished by a Diesel-powered electric generator and electric motor-driven units.

BOTTLE CREEK DISTRICT

The Bottle Creek district is on the east slope of the Jackson Mountains 65 miles by road northwest of Winnemucca, the nearest shipping point and supply center. In September 1936 cinnabar was discovered by the Scossa brothers, James and Arnold, of Winnemucca in the foothills of the Jackson Range about 3 1/2 miles northwest of lower Bottle Creek ranch. Shortly after this discovery a large number of locations were made, but most of the work has been confined to the Red Ore and White Peak groups of claims owned by the Scossa brothers. In July 1937 the Scossa claims were sold to John A. Fulton, of Reno, and associates. No production of quicksilver had been made up to the time of the writer's visit.

Red Ore and White Peak Groups

The Red Ore group comprises four unpatented claims and two fractions and the White Peak group three unpatented claims. These two groups of claims are separated by other holdings. Cinnabar was first discovered in the form of float, and the sources of the float were traced by panning. Placer nuggets of cinnabar up to 3 inches in diameter have been found on bedrock in a layer of coarse, well-rounded gravel about 18 inches thick covered with fine sand and detrital material ranging in thickness from a few feet to probably 60 feet.

Development work on the cinnabar deposits consist of three shallow shafts, the deepest of which is 30 feet, and several short adits and surface trenches, totaling, in all, about 200 feet of workings. This work was done by hand methods. At the time of the writer's visit the only equipment on the property was a small gasoline hoist and camp accommodations for four men.

The cinnabar occurs as seams and as disseminations in a highly altered and fractured andesite and rhyolite. Samples of the ore show values ranging from 1/2 to 3 1/2 percent quicksilver. With the small amount of development work done, the showings are encouraging and the outlook for the area appears promising.

CENTRAL DISTRICT

The Central district is in the northern part of the Eugene Mountains on the Humboldt-Fershing County boundary. It is sometimes divided into the New Central district on the north and the Central district on the south. Pronto, a station on the Western Pacific Railroad, is about 8 miles to the

northeast. The Central district was organized in 1861; in 1869 a 2-stamp mill was erected on the Golden Age property and was operated for a short time. In 1872 a 4-stamp mill and a Stedtefelt furnace were erected in this area, but this plant soon shut down because of litigation; it was destroyed by fire in 1876. Subsequently, small lots of ores were treated at the Wise reduction plant at Winnemucca and at the Clark mill on the Humboldt River. Both of these plants were small affairs and operated largely on custom ores. The production of precious metals from this district in the early days is not available, but in all probability the amount was not large. In recent years the district has been intermittently active; most of the activities being attributable to lessees who have made occasional carload shipments of ores to Utah smelters.

Golden Eagle Property

The Golden Eagle property comprises three unpatented and two patented claims owned by E. J. Baker and associates. The property was last active in 1935, when lessees produced a small quantity of shipping ore obtained by screening the dumps. Development consists of several adits and other workings, totaling in all about 1,500 feet. There is no mining equipment on the property.

The formation consists of shale and limestone. The principal vein is about 1 1/2 feet wide with a nearly vertical dip. The gangue is chiefly quartz carrying gold and silver and a small amount of lead.

King Midas Group

The King Midas group of five unpatented claims, owned by Walter F. Fisk, of Winnemucca, Nev., is 1/2 mile south of the Golden Eagle property. In June 1937 the property was under lease to R. W. Dougharity, who was prospecting the ground with his two sons.

Development consists of several shallow shafts, a number of short adits, and scattered surface workings totaling about 500 feet. There is no equipment on the property and mining is done by hand methods. The water available in the vicinity contains a considerable amount of arsenic and is unfit for domestic purposes. Water for domestic use is hauled from Pronto. Several narrow veins in shale and granite with variable strike and dip, occur on the property. The gangue is white quartz and the values are in gold and silver with a small amount of lead. In places a considerable amount of arsenic is present either in the form of oxide or arsenopyrite.

Yellow Jacket Group

The Yellow Jacket group of two unpatented claims, owned by S. L. Hershberger, adjoins the King Midas group on the south. These claims formerly were part of the Golden Eagle group. When the writer visited the property in June 1937, Hershberger and his two sons was prospecting the ground. Development consists of six adits, the longest of which is 250 feet, and several shallow shafts, totaling in all about 1,000 feet of workings. Mining is done by hand methods.

Formation is chiefly granite, and the ore occurs in narrow quartz veins with variable strike and dip. In places the ore contains a considerable amount of arsenic. Values are chiefly in gold and silver.

Marietta Group

The Marietta group of four unpatented claims on the northeast slope of the Eugene Mountains 12 miles south of Pronto is owned by C. F. Keil of Winnemucca, Nev. At the time of the writer's visit the property was under lease and bond to Frank L. McHenry and partner, who were prospecting by hand methods. This is one of the old properties in the district and it produced some shipping ore in the early days.

Development consists of eight short adits, the longest of which is 250 feet, and an inclined shaft 250 feet deep, totaling about 1,000 feet. The ore occurs in narrow quartz veins in rhyolite and shale. Values are in gold and silver.

COLUMBIA DISTRICT

The Columbia district is in the south end of the Pine Forest Range near the northwest end of the Black Rock Desert about 100 miles by road northwest of Winnemucca, the nearest supply center and shipping point. The district was discovered in 1870 by a man named Verry; it was organized as the Columbia district in 1875. The first ores were worked in an arrastra, and in the late seventies two stamp mills were erected to treat ores from the Badger and Independence mines. Each of the mills was equipped with five stamps and an amalgamation pan. One mill was operated by steam and the other one by water power obtained from Bartlett Creek. Only a small tonnage of ore was treated in these mills. Soon after the district was organized, it declined rapidly and never obtained any prominence.

In Baxter Canyon, in the western part of the district, gold was discovered by Clyde Garrett in 1914. Little production was made until 1936, when the claims were acquired by the Columbia Mines Co., Inc. Up to June 1937 this company produced several hundred tons of shipping ore per month.

Columbia Mines Co., Inc.

The Columbia Mines Co., Inc., comprises the Black Rock group of six unpatented claims. E. F. Nieman, of Salt Lake City, Utah, is president and general manager. An average crew of 12 men is employed.

Development work consists of a vertical shaft 100 feet deep, an adit 200 feet long, and other workings totaling about 1,000 feet. Mine equipment consists of a 25-horsepower gasoline hoist, a Gardner-Denver portable compressor, an assay office, and camp accommodations for about 14 men. Water for domestic use is obtained from a well sunk to 90 feet in the canyon near the camp. Because of the base character of the ore, no attempt has ever