

I.C. 6995

The formations are silicified limestone and black shale intruded by andesite. The vein strikes north  $15^{\circ}$  east and dips  $32^{\circ}$  to the west, averaging 3 feet in width. The width of the shipping ore averaged about 20 inches. The principal economic mineral in the ore is silver occurring in cerargyrite, argentite, and tetrahedrite, associated with cerussite and oxidized copper minerals.

#### Kramer Silver King Mining Co.

The property of the Kramer Silver King Mining Co. comprises a group of 5 patented claims owned by a small stock company controlled by a group from Kansas City, Mo. Only a small amount of development work has been done on the property and there is no record of any production. There is no equipment on the property.

#### LEONARD CREEK DISTRICT

The Leonard Creek placer district is in northwest Humboldt County at the south end of the Pine Forest Range, 95 miles by road northwest of Winnemucca, Nev., which is the nearest railroad and supply center.

The first discovery of placer gold was made in 1914 by Lee Curry. The placers in this area have been intermittently worked by sluices and rockers. No accurate figures are available on the amount of placer gold produced, but, according to Curry and Alley, the production has been about \$5,000. When the writer visited the district in June 1937 there was very little placer activity in the district.

#### Mattinson Placer

The Mattinson Placer, owned by R. D. and J. E. Mattinson of Leonard Creek, Nev., covers 2,300 acres of unpatented ground on and above Leonard Creek, a short distance above the Leonard Creek Ranch. In 1937 the Mattinson brothers installed power equipment to work the placer. The equipment consists of a  $1\frac{1}{2}$ -cubic yard capacity Sauerman dragline scraper operated by a Fordson-Allison dragline unit, a trommel, and sluice box. The trommel is 8 feet long and 4 feet in diameter, driven by a Dodge automobile engine. The first 5-foot section of the trommel is covered with a steel plate, on the inside of which are three sets of spiral blades for washing and disintegrating the material. The other 3 feet of the trommel is covered with  $1\frac{1}{2}$ -inch woven-wire screen. The screen oversize is rejected as waste and the undersize passes through a steel sluice box 40 feet long, 14 inches wide, and 8 inches high equipped with Hungarian riffles. Capacity of the machine is 150 cubic yards in 8 hours. When the writer visited the property 1,500 cubic yards of gravel had been treated and the recovery averaged 78  $\frac{1}{2}$  cents per cubic yard in gold. Water for washing and sluicing is pumped from a well 300 feet deep located 200 feet from the washing plant. Water consumption is 60 gallons per minute.

The width of the placer channels varies from 800 feet at the lower end to 1,500 feet to the upper end. At the lower end of the property three shafts averaging 33 feet deep have been sunk to bedrock, and the material excavated in sinking these shafts averaged 29 1/2 cents per cubic yard. At least 10 other shafts have been sunk along the lower portion of the channel for a distance of 2 miles, and the values are reported to range from 15 cents to \$3.85 per cubic yard. The average depth of the gravel in the lower part of the property is about 18 feet.

The upper portion of the property consists of a large flat area. Two shafts 21 and 55 feet deep, respectively, gave an average value of 20 cents per cubic yard. These shafts were not sunk to bedrock, as operations were hampered by the flow of water encountered. The depth to bedrock in this area is probably about 100 feet, as indicated by a drill hole.

The alluvium is chiefly sand, gravel, and a little clay, with a few large boulders on the surface. The values are distributed through the gravel from surface to bedrock, which is a soft tufa. The gold is rough, sharp, and fairly coarse, occasional nuggets having values up to \$5 or \$6. The average fineness of the gold is 903.

#### Basin Placer

The Basin Placer comprises 40 acres near the upper end of Leonard Creek owned by Arthur Alley and Lee Curry. In 1937 this property was under lease to Paul A. Tarp and associates, of Oakland, Calif. This ground has been worked on a small scale by sluicing and rocking when snow water was available. The placer has been sampled by 33 shafts, but the results of the sampling are not available. The depth of the gravel ranges from 2 to 24 feet and averages about 12 feet. Three wells have been sunk on the ground for water and the combined flow is said to be about 200 gallons per minute. A nugget valued at \$41.60 was found on this ground.

#### Montero Placer

Potential placer ground is included in the Montero ranch owned by Ramon Montero of Leonard Creek. The ranch comprises 5,500 acres. No placer gold has been produced from this property and very little prospecting has been done.

The water rights on the Leonard Creek watershed is owned by Ramon Montero, and during the dryest part of the year the surface flow is estimated to be 800 gallons per minute. During the spring run-off the flow may attain a maximum of 12,000 gallons per minute.

#### McDERMITT DISTRICT

The McDermitt district is in the vicinity of the town of McDermitt on the Oregon-Nevada boundary line, 77 miles north of Winnemucca, which is the nearest railroad point. Cinnabar was discovered in a range of low hills