

I. C. 7043

type Y, semi-Diesel engines each direct-connected to a type D Fairbanks-Morse alternator supplying current at 460 volts, 60 cycles.

Past mining operations have been confined to the Betty O'Neal and Estella veins, which strike nearly north and south, dip an average of 45° westward, and range from a few feet up to 55 feet in width. The ore bodies are of the replacement type in limestone and slate, cut by porphyry dikes. In places the limestone is highly silicified. The ore containing chiefly silver with a little copper and lead, is a mixture of silicified limestone and slate, fractured and recemented by calcite and quartz. The sulphide ore minerals are tetrahedrite, stephanite, argentite, polybasite, galena, pyrite, and sphalerite. In the oxidized ore near the surface the principal silver mineral is cerargyrite associated with copper in the form of malachite and azurite.

#### McCOY DISTRICT

The McCoy district is in the low, rolling hills on the west side of Reese River Valley 32 miles by automobile road south 35° east from Battle Mountain, the nearest shipping point and supply center. Gold was discovered here in 1914 by Joseph H. McCoy, who with others located a number of claims in a mineralized area about 1-1/2 miles long and 3/4 mile wide. Desultory prospecting followed for a number of years, but no ore was produced until about 1928, when, stimulated by the discovery of high-grade gold ore, a small boom ensued. In 1930 and 1931 the camp had a population of about 75 people. Mining activity gradually subsided, so that at the time of the writer's visit in April 1938 there was no mining activity in the district and the camp was almost deserted.

The production of the district has been about \$35,000, most of which was shipping ore mined from the Gold Dome property, which includes the Iron King claim, upon which the original discovery of gold was made.

#### Nevada Gold Dome Mining Co.

The Nevada Gold Dome Mining Co. comprises a group of 17 unpatented claims controlled by H. D. Brown, Jr., of Los Angeles, Calif. It includes the original discovery claims acquired by the present company in 1928. A 20-ton amalgamation mill was erected in 1930, but it operated only a few months. Production from the Gold Dome property, as compiled by the writer from the smelter and mint shipments, has been 468 tons of ore with a gross smelter value of \$26,863.62, an average of \$57.37 per ton; the bullion had a value of \$5,391.07.

Principal development has been from the Dome 1-1/2-compartment vertical shaft 265 feet deep, from which levels have been cut at the 50-, 100-, 150-, 200-, 250- and 265-foot points below the collar. Workings total approximately 1,200 feet. Equipment includes a blacksmith shop, tools, a single-drum gasoline hoist, a Gardner-Rix 160 cubic-foot compressor belt-driven by a Novo gasoline engine, a camp building, and a partly equipped mill. The mill is equipped with a jaw crusher, (9 by 16 inches), a ball mill (4 by 5 feet), and

a Gibson impact amalgamator. Power for milling is supplied by a caterpillar Diesel engine. Water for milling is obtained from Wellman Spring, 3/4 mile from the mill, through a 2-inch gravity-flow pipe line.

The formation is chiefly limestone intruded by diorite and quartzite. In places the limestone has been altered by contact metamorphism to tectite composed chiefly of garnet, epidote, and nontronite. The gold is erratically distributed in replacement and contact metamorphic deposits. A number of samples of the contact metamorphic material were taken by the writer and assayed for tungsten, but no tungsten was found. The ore minerals are gold, cerargyrite, copper carbonates, cerussite, pyrite, and galena in a gangue of quartz, iron oxide, jasper, calcite, and altered country rock. The smelter returns on the last shipment of ore made by Mrs. Florence McCoy on April 5, 1932, to the American Smelting & Refining Co. were as follows:

Metal quotations:	Gold	\$20.67 ounce	
	Silver	.29708 ounce	
Settlement Assay:		Ounces	
	Gold	1.615	
	Silver	9.1	
		Percent	
	Lead	1.3	
	Insoluble	58.0	
	Iron	15.7	
	Lime	.3	
		Pounds	
Wet weight:		58,240	
Moisture, 14.3 percent		8,328	
Dry weight		49,912 or 24.956 tons	
Metal payment:	100 percent of gold at \$19.50	\$31.49	
	95 percent of silver at \$0.29708	2.57	
	Gross value per ton	34.06	
Treatment charge:		3.50	
	Net value per ton	30.56	
	24.956 tons at \$30.56	762.66	
Deductions:	Freight advanced \$6.86 per ton	199.76	
	Net proceeds .....	562.90	

#### NEW PASS DISTRICT

The New Pass district is on the east slope of the New Pass Range near the boundary line of Lander and Churchill Counties, 31 miles west of Austin. Gold was discovered here by A. Monroe, Tom Plane, and others from Austin in the fall of 1865. In 1868 a 5-stamp amalgamation mill operated by steam was erected at Warm Springs several miles east of the mine. This mill operated for several years and treated about 12,000 tons of ore. About 1917 the Austin