

EASTGATE DISTRICT

The Eastgate district is on the west side of the Desatoya Range in southeastern Churchill County about 50 miles east-southeast of Fallon, the nearest railroad point. No information is available concerning the first mining activity in this area, although it is known that a number of gold and silver properties have been prospected in a desultory manner for at least 40 years. The production of the district is estimated at about \$25,000 in shipping ore, most of which was derived from the Gold Ledge group of claims. In the first part of 1939 the only activity was at the Gold Ledge property.

Gold Ledge Group

The Gold Ledge group of unpatented claims, owned by W. H. Schweis, of Reno, Nev., is situated on a mountain spur off the west side of the Desatoya Range about 56 miles east southeast of Fallon, the nearest railroad point. It can be reached by automobile over an unimproved desert road 5 miles in length, which leaves the Lincoln Highway about 1 mile west of Eastgate. The last 2 miles of the road is in a narrow, steep canyon with a number of sharp turns. First locations in this area were made by E. W. Baker in 1906. The Gold Ledge property has been worked intermittently by individuals and small companies. In 1934 the property was operated for a short time by the Monarch Gold Ledge Mining Co., which erected a 50-ton amalgamation-concentration mill several miles northwest of the mine, but it was unsuccessful; the mill equipment was sold in 1939. About \$20,000 in shipping ore has been produced.

Development consists of an adit 350 feet in length along the ledge, an inclined shaft 200 feet in depth with levels at 150 and 200 feet below the surface, a vertical shaft 110 feet deep, and other workings, totaling about 1,500 feet. Mining equipment includes a 7 by 6-inch Sullivan air compressor, belt-driven by an automobile engine; a West Coast, 5-horsepower, gasoline geared hoist; rock drills and other mining tools; a blacksmith shop; and camp accommodations for a crew of four men. Although there is no water at the mine, it can be obtained in Eastgate Wash, several miles northwest of the mine. In 1939 the property was being worked by Schweis with a crew of two men. In 1938 he shipped about 100 tons of ore, averaging approximately \$30 per ton, to the Dayton custom mill at Silver City, Nev. The truck haul to the Dayton mill, a distance of about 160 miles over hard-surfaced roads, cost \$5 per ton and milling was \$4 per ton. The shipper was paid for 90 percent of the assay value of the ore.

Ore containing gold and silver occurs in a fault fissure vein striking N. 30° E. and dipping about 65° easterly. The formation is altered rhyolite. The vein ranges in width from 1 to 6 feet, with no well-defined walls. The gangue is composed largely of crushed and iron-stained rhyolite showing little silicification. At the south end of the workings the vein has been intercepted by a number of faults that cut it at right angles; to the north, a fault striking N. and S. and dipping 70° E. apparently has displaced the vein several hundred feet north, as indicated by workings on a vein east of the fault.

The smelter returns on a shipment of ore made by W. H. Schweis to International Smelting Co. at Tooele, Utah, on March 20, 1936, furnished the following data:

Metal quotations:	Gold	\$35.00 per ounce.	
	Silver	.77 " "	
	Lead	4.6 cts. per lb.	
Settlement assay:		<u>Ounces</u>	
	Gold	.91	
	Silver	13.44	
		<u>Percent</u>	
	Copper	.07	
	Lead	2.0	
	Zinc	Nil	
	Sulfur	.5	
	Iron	1.8	
	Insoluble	90.2	
	Lime	.7	
		<u>Pounds</u>	
	Net weight	107,500	
	Moisture 2.64 per cent	<u>2,838</u>	
	Dry weight	104,662	52.331 tons

Metal payment:	Lead, 50 percent at \$0.01075 per pound.	\$.215
	Silver, 95 percent at \$0.77 per ounce.		9.831
	Gold, 91 percent at \$35 per ounce.		<u>28.984</u>
	Gross value per ton		39.030
	Base treatment charge, per ton \$4.00		
	Charge, 10 percent of gross metal payment over \$25.	<u>1.403</u>	
	Treatment charge.	5.403	<u>5.403</u>
	Net value per ton		33.627
	52.331 tons at \$33.627 per ton		\$1,759.73
	Deductions: Freight, \$4.70 per ton		<u>252.62</u>
	Net proceeds.		1,507.11

Buffalo Hump Group

The Buffalo Hump group of six unpatented claims, owned by W. H. Schweis is in the Desatoya Range about 14 miles by road southeast of Eastgate. It can be reached by automobile over a short road that leaves the Ione Road 10 miles south of the Lincoln Highway. The property was discovered by Thomas Wilson and Robert North some years ago, and although considerable prospecting has been done, the only production has been several carloads of shipping ore. In the first part of 1939 the property was inactive.

Development consists of several adits, the longest 400 feet and subsidiary workings such as drifts crosscuts, and raises, totaling about 1,500 feet. Equipment on the property includes tools for hand-mining, blacksmith shop, and camp accommodations for a crew of several men.

Free gold and a little silver occur in an area said to be about 100 feet wide and 200 feet long in a zone of fractured and altered rhyolite. The rhyolite is considerably kaolinized, but silicification is absent. Insufficient sampling has been done to determine the average gold content or whether the deposit is large enough to warrant operations on a large scale.

The smelter returns on ore shipped from the property by W. H. Schweis to International Smelting & Refining Co. on October 15, 1936, furnished the following data:

Metal quotations	Gold,	\$35.00 per ounce
	Silver,	\$.4475 per ounce
		Ounces
Settlement assay:	Gold	0.515
	Silver	5.49
		Percent
	Copper	.85
	Lead	.4
	Zinc	Nil
	Sulfur	.4
	Iron	1.1
	Insoluble	92.2
	Lime	.5
		Pounds
Net weight		49,410
Moisture 4.2 percent		2,075
Dry weight	47,335	23.6675 tons
Metal payment:	Silver, less 1/2 ounce at	
	\$0.4475 per ounce.	1/ \$ 2.233
	Gold, 91 percent at	
	\$35 per ounce.	16.403
	Gross value per ton. . . .	18.636
	Less treatment charge per ton	3.500
	Net value per ton	15.136
23.6675 tons at	\$15.136	\$358.23
Deductions:	Freight \$3.30 per ton	78.10
	Net proceeds	280.13

1/ Preliminary settlement for silver.

Building Stone

A deposit of volcanic tuff quarried locally for building stone occurs 3 miles west of the Eastgate ranch and about 1/2 mile off the Lincoln Highway. The deposit is said to be owned by Mrs. Lucille Downing, of Vincennes, Ind. The material was first quarried in the sixties to supply construction stone for buildings at Alpine and Eastgate, and later for several buildings at Fallon.

The quarry has been opened near the crest of a small hill that rises about 100 feet above the surrounding area. The face of the quarry is 100 feet in length and averages 8 feet in height. The tuff is siliceous in character with grain size quite uniform for this class of stone. It is white, weathering to a dull gray, and rather tough, but it is easily cut with an ordinary saw. It hardens a little on exposure, but not enough to raise its compressive strength appreciably.

The rock probably is suitable for building stone when little strength is required, but because of the distance to consuming centers it is of doubtful value in competition with other materials.

FAIRVIEW DISTRICT

The Fairview district is in southeast Churchill County 42 miles by road southeast of Fallon, the nearest railroad point and supply center. The principal mine, the Nevada Hills, is on the west slope of Fairview Peak at an elevation about 5,500 feet above sea level.

The first locations in the district were made by F. O. Norton and associates in 1905. The Nevada Hills mine was located by P. Langsden in January 1906. The discovery of rich silver-bearing float and ore in croppings created considerable excitement, and a boom ensued the following year, which gave the district a temporary population of several thousand. By 1907 the town of Fairview, laid out on the flat west of the mines, had a population of 1,000 and boasted two hotels, several restaurants, stores, and two newspapers. Daily stages and telephone lines connected Fairview with Fallon and Wonder, the latter being 18 miles north. During the first years of the camp's history, mining was in the hands of lessees and numerous wild-cat companies, most of the latter being very short lived. Until 1911, all the ores produced were shipped to smelters for reduction, and in consequence only the higher-grade ores were mined. The freight rate on ore from Fairview to Fallon in 1907 was \$12.50 per ton. In 1910 the Nevada Hills Mining Co., incorporated in 1906, acquired control of the Fairview Eagle Mines Co., a contiguous property, and the following year the company constructed a 20-stamp mill employing gravity concentration and cyanidation. Electric power was brought into the camp, and water for milling was obtained from wells in Westgate Wash, about 8 miles northeast of the mine. In 1917, after a profitable career, the Nevada Hills property closed because of depletion of the ore reserves. Production of the company from September 1911 to June 1917 is reported to have been \$2,265,000. After the property closed, the electric power line and the water line were removed, and the mill was dismantled. Since the Nevada Hills Mining Co. ceased operations, attempts