

The principal rock in the most productive portion of the district is quartz monzonite, which is cut by a series of basic dikes. The ore is in shoots in a number of quartz fissure veins frequently displaced by faults. While there are a number of other small veins in the district, the principal production has been derived from a series of parallel veins having a northwest-southeast strike and a dip to the northeast. The veins are narrow, ranging in width from a few inches to 3 feet. The average width mined in former years was probably about 15 inches. The ores, however, were unusually rich, which in a great measure compensated for the narrowness of the veins. From the old records the grade of the ore mined in the early days apparently ranged from \$100 to as high as \$400 per ton and averaged about \$175 per ton. Silver chloride was the principal economic mineral in ores from the surface to a depth of about 75 feet. At that depth water was present, and the mineralization changed. Below water level the ore minerals are ruby silver (both light and dark), polybasite, enargite, stephanite, ibnite, silver glance (?), galena, sphalerite, copper glance, pyrite and marcasite, arsenopyrite (pyragyrite and proustite), tetrahedrite, and chalcocite.

Barite deposit

Barite occurs in the Reese River district 9-1/2 miles southeast of Austin and 1 mile north of the Lincoln Highway. A group of three unpatented claims owned by Gus Laurent of Austin covers the principal veins. Although the deposits have been known for a number of years, their exploitation is handicapped by their distance from consuming centers; Battle Mountain, the nearest rail shipping point, is 100 miles northward.

The barite occurs in a series of veins, variable in strike, with a general flat dip averaging about 20° and ranging from 1 foot to 5 feet in width, averaging about 4 feet. The country rock is a decomposed monzonite. Deposits have been opened by a number of surface cuts and short adits totaling not more than 100 feet in length. The barite is of good quality, crystalline in character, easily crushed, and virtually free of any impurities except a small amount of oxide. Judging from the wide distribution of barite float found in the locality, a number of other veins probably are present, in addition to those already found. The veins are covered with a mantle of sandy detritus to a depth of 1 to 6 feet, and prospecting could be done easily by trenching with tractor and scraper, if such work were warranted.

SKOOKUM DISTRICT

The Skookum district is in the south end of a group of hills on the west side of Reese River Valley 9 miles west of Austin. Silver-gold float was discovered in this area in 1907 by an Indian who noticed fragments of mineralized quartz that had been dug out by a badger. The Indian sold his discovery to the Lemaire brothers, of Austin, who began development work in 1908. In the same year rich ore was discovered by James Watt; when the discoveries became known a large number of locations were made and a short-lived boom ensued. In the summer of 1908 two tent towns, known as Gweenah and Skookum, sprang up and attained a combined population of 200, but the following

year the camps were virtually abandoned. The Gweenah mine has been the principal producer; and, according to Rene Lemaire, the production of the district has been about \$100,000, all of which was shipping ore. In recent years there has been little activity.

Gweenah Mine

The Gweenah mine comprises a group of seven unpatented claims owned by Rene and Louis Lemaire of Battle Mountain. The property has been inactive since 1935.

Development includes several shafts sunk by lessees in the early days, the deepest being 125 feet, and other workings totaling approximately 1,200 feet. There is little mining equipment on the property.

The principal vein strikes N. 30° W, with a dip ranging from nearly vertical to 60° northeasterly; it ranges from a few inches to 4 feet in width and in places splits into several branches. The country rock is quartzite. Ore minerals are argentiferous tetrahedrite, pyrite, chrysocolla, with a little lead, in a gangue composed chiefly of brecciated quartz stained with iron oxide.

The smelter returns on the last carload of ore shipped from the property on September 20, 1935, to the International Smelting & Refining Co. by R. W. Lemaire furnished the following data:

Metal quotations:	Gold	\$35.00 per ounce
	Silver	.77 per ounce

Settlement assay:	Silver	<u>Ounces</u> 155.35
	Gold	.1425
		<u>Percent</u>
	Copper	0.26
	Lead	.55
	Zinc	Nil
	Insoluble	93.05
	Iron	2.35
	Sulphur	.15
	Lime	.9

	<u>Pounds</u>
Wet weight	70,460
Moisture, 1 percent	704
Dry weight	69,756 or 34.878 tons

Metal payment:	Silver, 95 percent at \$0.77 per ounce	\$113.639
	Gold, 91 percent at \$35 per ounce	4.539
	Gross value per ton	118.178
Treatment charge:		5.50
	Net value per ton	112.678
	34.878 tons at \$112.678	3,929.98
Deductions:	Sampling	\$21.14
	Assaying	8.00
	Hauling (sampler to smelter)	35.00
	Net proceeds	64.14
		3,865.84

This shipment was hauled by truck from the mine to the Utah Ore Sampling Co. plant at Murray, Utah.

WASHINGTON DISTRICT

The Washington district lies on the west slope of the Toiyabe Range near the boundary between Lander and Nye Counties, 35 miles south-southwest of Austin. It was organized in 1863, and for several years thereafter a number of mines and prospects were located and actively worked in San Pedro, Cottonwood, and San Juan Canyons; but with the decline of silver mining in the Toiyabe Range, the district became inactive and remained almost forgotten for many years. The amount of silver mined from this area in the early days is unknown, but in all probability was small. In recent years the only production has been several shipments of ore made by lessees from the Camp Bird group of claims.

Camp Bird Group

Camp Bird group, owned by Mrs. Rose Warner of Austin, Nev., comprises 16 unpatented claims between Washington and Cottonwood Canyons about 1 mile south-east of the old camp of Washington. The property was first worked in the late sixties, when considerable development work was done and some production was obtained. In 1923 the property was acquired by New York interests that installed a tramway and erected a 50-ton cyanide plant; after a short time the company ran into financial difficulties and stopped work. In recent years a small amount of shipping ore has been mined by lessees.

Development comprises an adit 900 feet long and other workings totaling several thousand feet. In 1938 the road to the property was washed out by cloudbursts, so that it was inaccessible by automobile.

The prevailing formation in the vicinity is lime shale and quartzite. The principal vein, known as the New Hope, consists of quartzite breccia recemented by quartz. It has a north and south strike and a flat dip eastward. The ore minerals are argentite, galena, tetrahedrite and their alteration products. A small lot of ore shipped to the McGill smelter of the Nevada