

I. C. 7093

FIREBALL DISTRICT

The Fireball district is in a low range of unnamed hills in northwest Churchill County about 10 miles northwest of Springer's Hot Springs on the Victory Highway. It was discovered by Fred Anderson in 1930. For several years after its discovery a number of properties were prospected by claim owners and lessees for shipping ore, but the results were discouraging and only about 20 tons of ore that averaged \$30 per ton is reported to have been produced. In recent years the only activity has been a small amount of desultory prospecting.

The largest property in the district is the Fireball group, comprising five unpatented mining claims and 200 acres of patented railroad-grant land owned by E. Opdyke of Wadsworth, Nev. Other claims are owned by C. C. Higgins of Reno, Nev.

The economic minerals are gold and a little silver occurring in quartz stringers in silicified limestone cut by rhyolite and andesite.

HOLY CROSS DISTRICT

The Holy Cross district is in southwestern Churchill County near the Mineral County border. Schurz, a station on the Mina-Hazen branch of the Southern Pacific R. R., is 12 miles southwest, and the town of Fallon is 29 miles north. The district was discovered in 1911 by V. B. Terrell, working under grubstake agreement with Craig Catterson, formerly of Rawhide, Nev. Following the discovery considerable prospecting was done, but no important mineral deposits were discovered. The total production, chiefly by lessees, has been about \$40,000 in shipping ore. In the fall of 1939 several lessees were active on claims controlled by the Terrell estate.

A diatomaceous earth deposit south of Fallon and several groups of claims northwest of the Holy Cross district proper are included in the Holy Cross district for convenience.

Terrell Group

A group of 26 claims, comprising the principal workings in the district, is controlled by the Terrell estate, administered by Henry Smith of Fallon, Nev.

The workings consist of about 10 shallow shafts and several adits, comprising in all about 3,000 feet of scattered workings. The deepest shaft is 140 feet and the longest adit 1,500 feet. Equipment on the property consists of tools for hand mining and seven camp buildings.

Ore occurs in a series of narrow veins in rhyolite and andesite. The principal metallic minerals are silver chloride, gold, cerussite, a small amount of zinc, and in places some manganese. On the Last Hope claim manganese silver veins striking north and south and dipping vertically up to 2 feet in width are traceable on the surface for several thousand feet. The manganese, in the form of psilomelane and pyrolusite, ranges from 5 to 15 percent

but the deposits are too small and too low-grade to have economic importance for their manganese content. The silver and gold occur largely in the fines, and lessees obtain a high-grade product by screening and hand sorting.

A small shipment of high-grade screened ore mined from the Silver Star claim by E. P. Frankum and shipped to the Selby smelter of the American Smelting & Refining Co. at Selby, Calif., on August 27, 1938, furnished the following data:

Metal quotations:	Gold	\$35 per ounce
	Silver	.64 1/8 cents per ounce
	Lead	4.90 cents per lb.
		<u>Ounces per ton</u>

Settlement assay:	Gold	1.62
	Silver	449.92
		<u>Percent</u>
	Lead	13.5
	Insoluble	58.8
	Iron	5.4
		<u>Pounds</u>

Gross weight 12 sacks ore	1,185
Tare	<u>14</u>
Wet weight	1,171
Moisture, 1.5 percent	<u>18</u>
Dry weight . . . . .	1,153

Metal payment:	Gold, @ \$31.81663 per ounce	\$ 51.54
	Silver, less 5 percent @ \$0.64 1/8 per ounce	274.09
	Lead, less 10 percent at 3.4 cents per pound	<u>8.26</u>
	Gross value per ton	333.89
	Smelter charge	<u>10.95</u>
	Net value per ton	322.94

1,153 pounds or 0.5765 ton at \$322.94      \$186.17

Deductions:

Sampling and assaying	\$10.00
Freight	9.32
Parcel post (sacks)	<u>.40</u>
	19.72
Net proceeds	<u>19.72</u>
	\$166.45

Cinnabar Hill Group

The Cinnabar Hill group of six unpatented claims, owned by A. L. Robinson of Fallon, is in a range of low hills 38 miles southeast of Fallon. It is accessible by automobile by driving south from Fallon on the Fallon-Schurz highway to the Camp Terrell turn off, a distance of 25 miles, and thence northeast for about 13 miles, or 6 miles beyond Cushman Well, an old landmark in this

section. Cinnabar float was found in this area by Robinson in October 1938; its source was discovered by tracing the float up the side of a small hill. As the property is in the prospect stage of development, there has been no production.

Development work includes a 75-foot shaft, a 60-foot adit, and a small amount of drifting and crosscutting, totaling about 175 feet.

The formation is rhyolite and andesite flanked on the west by granite. The cinnabar occurs in a fissure striking N.  $70^{\circ}$  E. and dipping about  $40^{\circ}$  NW. Not enough work had been done to determine the extent of the deposit. The cinnabar occurs in a gangue of quartz, kaolin, and decomposed rhyolite stained with iron oxides.

#### Bimetal Group

The Bimetal group of three unpatented claims, owned by A. L. Robinson of Fallon, lies 1 mile due south of the Cinnabar Hill property. Gold was discovered here by Robinson in 1932. The only production has been several tons of ore averaging about \$40 per ton.

Workings comprise four shafts ranging from 10 to 100 feet in depth and several open-cuts. Equipment includes tools for hand mining and camp accommodations for two men.

Free gold alloyed with a little silver occurs in a quartz vein in granite. The vein strikes S.  $70^{\circ}$  E. and dips about  $55^{\circ}$  NE. It is persistent and traceable on the surface for over 1,000 feet, but is narrow, ranging in width from several inches to a maximum of 2 feet.

#### Diatomaceous Earth Deposit

A large deposit of diatomaceous earth occurs 17 miles south of Fallon, 1-1/2 miles by road off the Fallon-Schurz Highway. Although the deposit has been known for many years, it has been little prospected, and there has been no production.

The deposit covers a group of several well-rounded hills partly capped by basalt. For the most part, the deposit is covered to a depth of several feet with detritus, consisting of basalt boulders and fragments of petrified wood mixed with sand. In one place where the diatomaceous earth is exposed on the side of a hill, a thickness of at least 30 feet is indicated. The material is pure white, homogeneous, and apparently of good quality.

#### I. X. L. DISTRICT

The I. X. L. district is on the east side of the Stillwater Range in central Churchill County. The Silver Hill section on the west slope of the range is sometimes considered a separate district, but in this paper it is included as part of the I.X.L. The I. X. L. district was organized in 1879.