

1840 0001

I.C. 7022

(112)

Item 1

However, in addition to the slag product, large quantities of speiss (chiefly FeAs_2) formed in smelting was a source of considerable trouble to the early-day smelters, as they could not completely extract the values. An analysis (by F. Claudet, London) of the speiss from the Richmond furnaces for 1878 was as follows:

| | <u>Percent</u> |
|--|----------------|
| Arsenic | 32.95 |
| Antimony | .13 |
| Molybdenum | 2.31 |
| Sulphur | 3.34 |
| Lead | 2.18 |
| Copper | 1.06 |
| Iron | 57.02 |
| Zinc | .07 |
| Lime | .34 |
| Silica | .23 |
| Silver and gold | .029 |
| Silver, per ton of 2,000 pounds, 8.01 ozs; | |
| gold, 0.43 oz. | |

The speiss was formed in proportion of about 1 ton of speiss to each ton of base bullion; with a production of at least 225,000 tons of base bullion, the amount of speiss thrown on the dumps probably originally exceeded 100,000 tons. Some of the speiss was reworked, so that the metal content is less than that given in the analysis. The valuable content of the speiss probably averages 30 percent arsenic, 3 percent lead, 1 percent copper, 2 to 3 ounces in silver, and 0.15 to 0.20 ounce in gold. From 1920 to 1924, the U. S. Smelting, Refining & Mining Co. shipped to their smelter in Salt Lake Valley more than 40,000 tons of speiss. Re-treating this material depends largely on the market for arsenic, as this element constitutes the principal value.

FISH CREEK DISTRICT

The Fish Creek district is at the south end of Antelope Valley, 35 miles by automobile road southwest of Eureka. The first location was made here about 1870 by James Butler, who, 30 years later, attained fame by discovering the rich silver deposits at Tonopah. In 1881, Butler obtained patent on two claims known as the North and the South Antelope. Although considerable development work was done on these claims in the early days, the only production was a few tons of shipping ore. After the death of Butler, the two claims were held by his heirs for a number of years, but they finally reverted to the county for nonpayment of taxes and in 1933 were sold at a tax sale.

Eight miles northerly from the Antelope property, a group of claims was located in 1882 by Angelo Belli, who made several small shipments of silver ore. In 1929, the property was relocated by Stanley Fine of Eureka, who discovered scheelite on the ground. There has been no production of tungsten ore or concentrates.

Antelope Group

The Antelope group of two patented and six unpatented claims is owned by Judge Edgar Eather, Stanley Fine, and Robert C. Kelley of Eureka. Development consists of an adit 350 feet long, a raise 240 feet in length, and a number of shallow shafts, inclines, and other workings totaling about 1,000 feet. Equipment includes a blacksmith shop, a 14-kilowatt generator belt-driven by a model A Ford engine, and a small electric centrifugal pump. The pumping equipment was installed to handle a small flow of water encountered in the lower workings on the North Antelope claim. In the fall of 1937 the property was idle.

The formation is chiefly steeply dipping shaley limestone trending north and south, locally disturbed by minor folds. To the north, the limestone is intruded by granite porphyry. Two fissure veins, known as the North and the South Antelope, ranging from 1 to 5 feet in width, have been prospected. The ore is largely oxidized and contains silver, lead, and zinc. In the lower workings of both veins, bunches of massive sulphides composed of pyrite, galena, and sphalerite are beginning to appear.

Black Rock Group

The Black Rock group of five unpatented claims, owned by Stanley Fine and associates of Eureka, is on the western slope of the Fish Creek Range, 26 miles by road southwest of Eureka. Development consists of four shallow shafts ranging in depth from 10 to 60 feet, an adit 100 feet long, and other workings totaling about 400 feet. There is no equipment on the property and in recent years it has been inactive.

The prevailing formation in this area is dolomitic limestone. The vein varies in width from a few inches to a maximum of 2 feet, and it is traceable on the surface for nearly a mile. At the north end, the vein has a strike nearly east and west with a northerly dip, while at the south end the strike is N. 65° E. with a vertical dip. Scheelite occurs as scattered crystals up to 2 inches in diameter in a gangue composed chiefly of quartz and calcite stained with iron oxides and copper minerals. A little silver and lead are also present.

LYNN DISTRICT

The Lynn district is in the Tuscarora Range, 22 miles by automobile road northwest of Carlin, Nev. Placer gold was discovered here by Joe Lynn in April 1907, and in the same year the Lynn Big Six Mine, the principal lode property, was located by W. E. Barney. The following year a small, short-lived boom ensued. The Lynn Big Six Mining Co. erected a small amalgamating mill at their mine in 1917, in which a small tonnage of ore was treated. There has been a small but consistent annual production of gold from a number of small properties, and up to 1936 the total production, based on incomplete data, has been about \$225,000, most of which was derived from the placer deposits. In 1937, lessees worked the Lynn Big Six mine, owned by the Beaver Crown Consolidated Mining Co. (successor to the Lynn Big Six Mining Co.).