



who used it for its supposed medicinal value. Walter Schmidt located the first nitrate claims in the district in 1868. Attention was called to the nitrate deposits in the eighties by an encouraging report prepared by B. B. Redding, which was read before the California Academy of Sciences. A company known as the Nevada Niter Co. was organized and acquired an extensive acreage of nitrate lands, but after a short period of desultory prospecting the venture was abandoned. Interest was revived about 1902, when a group of Lovelock residents located and patented 320 acres.

This ground was bonded to Detroit interests, which organized the American Nitrate & Potash Co. This company did a small amount of work, but as results proved disappointing the project was abandoned. There is no record of any production of nitrates, and for many years there has been no activity on the ground. A description of the deposits is given by Gale. The sodium nitrate occurs in small irregular seams and bunches in places that are protected from weathering. It is associated with other salts, chiefly sodium chloride. The occurrences of the nitrate are small and scattered, and the outlook for their commercial exploitation is discouraging.

LA PLATA DISTRICT

La Plata, also known as the Mountain Well district, is in central Church-hill County on the eastern slope of Stillwater Range, about 12 miles in an air line a little west of north from Bermond (Frenchman's station) on the Lincoln Highway (U. S. Route 50). The nearest railroad station is Fallon, about 50 miles west by road via Dixie Valley. The old road from Fallon via Stillwater is considerably shorter, but part of the road from Stillwater to Mountain Well near the summit of the range is in poor condition and seldom used.

The La Plata district, discovered in 1862, attained considerable prominence as a boom camp during the middle sixties, but there is little evidence to show that any appreciable amount of ore was produced. The town of La Plata, established about 1863, was the county seat of Churchill County from 1864 to 1868. In 1863 and several years afterward many claims were located, many of which were sold to eastern capitalists, who did considerable prospecting, but the general results were discouraging. The county seat was removed to Stillwater in 1868, and the following year most of the miners deserted the district for the White Pine boom in the eastern part of the State.

In 1864 the Silver Wave Mining Co. erected a 10-stamp mill at La Plata at a cost of \$150,000, but little evidence, such as tailings or extensive mine workings exists to indicate a large production. This mill was removed subsequently to the Ellsworth district in Nye County. Another mill was built in Eleven-Mile Canyon, several miles north of La Plata Canyon, about 1864, which likewise was unsuccessful, presumably for lack of ore.

^{11/} Gale, H. S., Nitrate Deposits: Geol. Survey Bull. 523, 1912, pp. 19-25.

From 1869 to the present, the only mining activity has been sporadic prospecting operations. Over the last 35 years mineral-production statistics show several small shipments of silver ore. In April 1939 the district was inactive. Fluorite was discovered there in 1939.

La Plata Mine

A group of unpatented claims, comprising the old La Plata mine and mill-site, was relocated in January 1939 by F. J. Sur, Lewis Barr, and J. C. Stewart of Fallon, Nev.

Development consists of an incline shaft, several adits, and other workings, totaling approximately several thousand feet. Some of the workings are caved and inaccessible.

The prevailing formation is shale intruded by granite. The La Plata vein, as exposed in a small stope open at the surface, is in granite. The vein strikes E. and W. and dips 60 N. Other quartz veins, either in the granite or in the shale outcrop in the vicinity, have been prospected superficially by open—cuts. The economic mineral is silver.

Michigan Claim

The Michigan claim was located by Mark Harris and Fred T. Pine, of Westgate, Nev., in the early part of 1939 as a fluorspar prospect. The claim is in the lower part of La Plata Canyon about 2 miles below the old La Plata townsite. Only location work had been done on the claim to April 1939.

Limestone intruded by rhyolite is the prevailing formation. Fluorspar occurs in a series of small fractures in the limestone striking about eastwest and traceable on the surface for several hundred feet. From surface showings, the fluorite veins are too small to be commercially important.

DEETE DISTRICT

The Leete district is in northwest Churchill County at Leeteville on the Southern Pacific R. R. 18 miles east of Wadsworth in Washoe County. In former years the Playa lake from which salt was produced was known as the Eagle salt marsh, while that which produced borax was called Hot Springs borax marsh. Salt was first produced here in 1870 by a man named Leete, who discovered the deposit and organized the Eagle salt works. Large quantities of salt were produced annually for many years to supply the silver mills on the Comstock and later for dairy and domestic use. This deposit, because of better transportation facilities, supplied salt to the Comstock mills in competition with other sources of supply, particularly Sand Springs Marsh. (The Central Pacific, now the Southern Pacific R. R., was completed May 10, 1869.) The Eagle salt works continued to produce salt intermittently until 1915, when operations ceased. A small amount of borax was produced from the salines in 1871, but the venture was unsuccessful. From 1879 to 1884 the production of salt amounted to 334,000 tons, and the total production probably has exceeded 500,000 tons.

The Playa lake in which the salt and borax occur is a desert mud plain of recent age covered during the summer months with a white saline efflorescence. The salt was recovered by solar evaporation. The saturated brine accurring about 20 feet below the surface was pumped into shallow excavated vats enclosed by low embankments. The vats were 50 feet wide and about 100 feet long and covered a considerable area. The saturated salt solution crystallized on the sides and bottoms of the vats, and, by successive evaporations, a layer of salt was formed that was thick enough to be hoed into piles and shipped without further refining. One acre of vats produced 10 tons of salt daily during good weather. The season lasted from June to October.

SAND SPRINGS DISTRICT

The Sand Springs district is 25 to 30 miles southeast of Fallon, the nearest railroad point. The Sand Springs salt marsh in this area is a playa lake covering nearly 40 square miles in Salt Springs Valley, known in the early days as Alkali Valley and recently as Four-Mile and Eight-Mile Flats. Salt production began in 1863; previous to 1870 considerable quantities of salt for the reduction of silver ores on the Comstock were produced. After 1870, salt for metallurgical purposes could be obtained more cheaply from the deposits in the Leete district because of better transportation facilities; therefore salt production at Sand Springs was discontinued temporarily. In recent years the Sand Springs salt field has been worked by small companies and individuals to supply salt for local dairy and table purposes.

Borax was discovered in the Sand Springs salt marsh about 1869, and the American Borax Co. erected a plant, which operated for several years.

The gold deposits of the Dan Tucker property and vicinity were first prospected in 1905 by C. W. Kinney. The production of metals, chiefly gold, has been about \$30,000, most of which was from the Dan Tucker mine.

Dan Tucker Mine

The Dan Tucker mine comprises a group of 5 unpatented claims situated near the Lincoln Highway 31 miles southeast of Fallon, Nev., the nearest railroad station and supply center. Although the property was prospected by C. W. Kinney in 1905, very little work was done until 1912, when Leslie L. Leonard and C. W. Kinney sank a 100-foot shaft. The first production was made in 1919 by lessees, who shipped three carloads of ore yielding \$215 to \$300 per ton. The Dan Tucker Mining Co. was organized in 1925, and in the following year it leased the mine to Smith, Towle, and Young, who in 1927 erected a small amalgamation mill at Sand Springs in which 1,000 tons of ore was treated. In 1931 the property was acquired by another company, and in 1938 it was awarded to E. E. Tailleur, Fred Tailleur, and Dick Kemp on a labor lien. The owners proceeded to work the mine and shipped 10 carloads of rich cre. In the fall of the same year those connected with the Bralorne Mines, Ltd., of British Columbia, obtained a lease and bond and organized the Swamit King Mines, Ltd., a subsidiary, to operate the Dan Tucker and other properties in the vicinity. In April 1939 the company had 12 men on development. Production from the Dan Tucker mine is reported to have been about \$30,000, mostly shipping ore.