and a number of adits and open-cuts totaling about 3,000 feet. None of the workings are more than 200 feet below the surface. No water is available in the immediate vicinity of the camp and must be hauled for domestic use from Hot Springs station on the Victory Highway or other places. In the fall of 1938 the only activity in the area was on the Valley King group of claims, which was being worked by lessees.

Valley King Group

The Valley King group, consisting of five unpatented claims, is owned jointly by George W. Lang and Olaf Johnson of Lovelock. The Gold King, the original discovery claim adjoining the Valley King group, is owned by George W. Lang individually. In 1938 the Valley King group was under lease to Kenneth Dale and Dick Collins. The lessees, after mining and shipping about 30 tons of ore, averaging $40 per ton, to the Dayton custom mill at Silver City, Nev., relinquished the lease.

The Valley King single-compartment shaft attained a depth of 150 feet. Other scattered shafts and subsidiary workings total about 1,000 feet. No equipment other than tools for hand mining is on the property.

The formation is chiefly andesite and rhyolite. The economic minerals are gold and silver occurring in small veins ranging in width from a few inches to 1 foot. The principal vein strikes N. 25° E. and dips 60° to 70° SE. The gold is in a free state, and the silver occurs as cerargyrite in a gangue of quartz and crushed country rock impregnated with iron oxides. A small amount of scheelite occurs in the vein material.

In 1932 Olaf Johnson discovered placer gold on the top of a small hill on the Valley King claim. The alluvium, largely clay with a few small boulders and well-rounded pebbles, is cemented with lime. Several ounces of gold have been produced by dry-washing methods. The gold which is associated with black sands, has a fineness of about 600.

Diatomaceous Earth

Diatomaceous earth outcrops along the eastern foothills of the Trinity Range north and south of Jessup for 15 miles. The deposits appear to be very extensive laterally, but little work has been done to determine their thickness. For the most part the diatomaceous earth is covered with alluvial material eroded from the nearby mountains; where exposed, it is mixed with some volcanic ash. The only production has been a few carloads used locally for insulation purposes.

LAKE DISTRICT

The Lake district is on the east side of the Humboldt Sink at the southern extremity of the Humboldt Range. The salt-producing section near Huxley station on the Southern Pacific R. R. is known as White Plains Flat.

The principal production from the district has been salt from salines in the Humboldt Sink. A small amount of shell limestone also has been produced for agricultural purposes from deposits near Huxley station on the Southern Pacific R. R. Sodium nitrate also occurs in the district, but none has been produced.

Limestone Deposit

A deposit of shell limestone occurs on the southwest flank of the Humboldt Range about 1 mile northeast of Huxley station on the Southern Pacific R. R. The main part of the deposit probably is on patented railroad land. A small tonnage of limestone for agricultural purposes was mined about 30 years ago and shipped to the Pacific coast. The remains of an abandoned kiln on the deposit is evidence that an attempt was made to burn the limestone locally for lime.

The deposit is of lacustrine origin, composed of fresh-water mollusks. Where exposed, it covers an area approximately 3,000 feet long and 1,000 feet wide. The deposit was formed in an arm of ancient Lake Lahontan and, judging from its origin, is probably not more than 10 feet thick. A number of scattered open-cuts expose the material to a depth of 4 to 6 feet. Because of its proximity to the railroad, its purity, and the ease with which it can be mined, the deposit is of potential value as a source of limestone for agricultural use on the Pacific coast.

White Plains Salt Deposit

The White Plains salt deposit, on the main line of the Southern Pacific R. R., has been a notable source of salt production in Nevada. It was discovered by Walter Schmidt in 1870, and shortly after it was acquired by the Desert Crystal Salt Co., which operated for many years. The salt was produced by solar evaporation in a series of vats dug in the surface of Humboldt Sink. The vats comprised a total length of 8,500 feet and were 55 feet in width. The brine was pumped into the vats from salt springs in the vicinity. Beginning in 1911, the International Salt Co., operating under lease from the Desert Crystal Salt Co., produced small amounts of salt annually for several years; the last production of record was in 1915. Although the bulk of the salt obtained here was used in the reduction of silver ores in the early days, some salt was also refined for domestic and dairy purposes.

In addition to the springs, salt in the form of an incrustation on the surface of Humboldt Sink covers an extensive area. Although the reserves are no doubt large, the deposit is too remote from large consuming centers to compete with other sources of supply.

Sodium Nitrate Deposit

Sodium nitrate has been found over a considerable area on the southeast side of the Humboldt Sink in the low hills constituting part of Humboldt Range. One of the hills, of a marked red color, is known as Niter Butte. The existence of nitrate salt in this locality is said to have been known to the early Indians.

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.[11] 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 Churchhill 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.