

Oakland group

The Oakland group of four unpatented claims, owned by Albert C. Galkins, lies 3 miles west of Searchlight: In 1936 property was under bond and lease to William G. Smith and associates and three men were employed in the latter part of the year to sink a shaft to intersect a vein exposed on the surface. Development comprises several shallow shafts, short tunnels, and open cuts, totaling about 500 feet. Equipment includes a 25-horsepower Western geared hoist, an Ingersoll-Rand Imperial No. 11, 2-drill compressor, and a small amalgamation mill. The mill contains a jaw crusher (7 by 10 inches) and four Nissen stamps driven by a Dodge automobile engine, and two amalgamation plates (3 feet wide and 8 feet long). The ore occurs in fissure veins in andesite near a contact with monzonite. In sinking the shaft a flow of water, estimated at about 2,50% gallons per day; was encountered at a depth of SO feet.

Fay City group

The Bay City group of three unpatented claims / also owned by Albert C. Calkins, adjoins the Oakland group on the south. This property is under lease to E. C. Douglas, who produced ore valued at \$1,000 in 1936. The ore was treated in the mill on the Oakland property. Development includes a shallow shaft and other workings totaling about 200 feet. Mining equipment includes a small gasoline hoist.

Camp Dupont

In the vicinity of Camp Dupon 17 miles northeast of Searchlight, a number of claims are owned by individuals from Las Vegas, Nev., and Searchlight. Although considerable work has been done, all the properties are in the prospect stage. In 1922 the Dupont Copper Mines Co. (probably defunct) acquired the Sazarac, Bornite, and other groups of claims in this area, but no production was ever made.

In February 1937 the only activity was on the Big Shot group of two unpatented claims owned by George H. Kent of Searchlight and C. G. Duff of Las Vegas, Nev. About 35 tons of ore were mined from this property in 1936. The ore was treated in a two-stamp amalgamation mill on the Colorado River 6 miles to the east. Development work comprises an adit 150 feet long driven on a narrow vein. Mining is done by hand methods. The vein ranges in width from a few inches to 2 feet, strikes east and west and dips 60° to the south. /Formation is rhyolite. Values are in gold in a gangue of quartz and crushed country rock stained with iron oxides.

SLOAN DISTRICT

(Limestone, Dolomite, Radium)

The Sloan district, in the vicinity of Sloan, a station on the main line of the Union Pacific R.R. connecting Salt Lake City, Utah, and Los Angeles, Calif., is about 20 miles a little west of south from Las Vegas, Nev.,

I. C. 6964

The limestone is mined by quarrying and shrinkage stoping. Originally the limestone bed formed a prominent cliff so that it could be mined by quarrying with little dilution from the overlying dolomite. In recent years, however, the amount of overlying dolomite quarried with the limestone became excessive and preparations were made to mine the limestone by shrinkage stoping. For this purpose development headings 12 feet and 8 feet in width are driven at the base of the limestone bed. The shrinkage stopes are about 30 feet wide, 80 feet high, and up to 250 feet long. Pillars left between successive stopes average 20 feet in width. To facilitate drawing off the broken ore from the stopes, drifts are driven into the pillars, and from these drifts small crosscuts tap the stopes at convenient intervals. At the time of writer's visit the shrinkage-stoping operations were in the experimental stage, and all the details had not been worked out completely.

The stopes are advanced by drilling on broken rock. Holes are drilled from 8 to 12 feet deep with jackhammers and 7/8-inch hollow hexagonal steel with detachable bits: Blasting is done with 40-percent gelatin dynamite and No. 6 detonaters.

The broken limestone is shoveled off the floor of the level by hand into 1-ton mine cars. Eventually, mucking machines may be employed. Tramming is done by hand. The crushing and lime-burning plants are below the quarry floor, so that the limestone is transported by gravity trams of the 3-rail type.

Carnotite Deposit

In 1915 carnotite was discovered in a railroad cut several miles south of Sloan by N. E. Williams of Las Vegas, Nev.

The carnotite, associated with calcite and manganese oxides, occurs as thin coatings along joint planes in rhyolite. Very little prospecting work has been done, and the deposits are too small to be of commercial interest.

SUNSET DISTRICT

(Gold, Feldspar)

The Sunset district is in southern Clark County near the California boundary line 4 1/2 miles east of Desert, Calif., a station on the Los Angeles & Salt Lake R.R. This district adjoins the Crescent district on the north. The only productive property in this area has been the Lucy Gray mine, discovered by Lee Bright in 1905. This property is said to have produced about \$50,000 and, judging from the tailings pile at the mine, comprising about 4,000 tons, this is probably substantially correct. The property formerly was equipped with a Lane slow-speed Chilean mill and cyanide leaching equipment.

Deposits of feldspar in pegmatite dikes were located in this area in 1936, but no production has been made.

via Highway 91. The only production from this area has been limestone and dolomite. The occurrences of carnotite have proved to be too small to have commercial interest as a source of radium:

The Sloan limestone deposit, discovered in 1910, was first worked in 1912 to supply lime for the treatment of gold and silver ores at Goldfield, Tonopah, and other places where the cyanide process was employed. The deposit was mined by the Nevada Rock Corporation up to 1927, when it was purchased by the U.S. Lime Products Corporation, the present owners. In addition to mining limestone, this company started to mine the dolomite that occurs above the limestone bed. The total production of limestone and dolomite from this deposit is probably more than a million and a half tons. This operation is interesting not only because of the magnitude of the deposit but because it is in the desert region far removed from the centers of population where lime is used. Los Angeles, the principal consuming center, is 280 miles from Sloan.

United States Lime Products Corporation

The U. S. Lime Products Corporation employs an average of about 50 men in the annual production of about 50,000 tons of crude limestone and dolomite and about 25,000 tons of lime and dolomite products. At Sloan the company operates a plant for converting the dolomite and limestone into lime, lime-hydrate, dolomitic lime, and dolomitic lime-hydrate. Crude limestone is shipped to southern California for use in the refining of sugar and in open-hearth steel furnaces.

Plant equipment includes a Blake-type crusher (9 by 38 inches), two rotary kilns (7 and 8 feet, respectively, in diameter and 100 feet in length), four vertical kilns, hydrators, steel silos, trommels, elevators, bagging machines, and other equipment for a complete plant. Power for the plant is furnished by Diesel engines generating electricity. The company also maintains a control labratory at Sloan for making chemical and physical tests on the lime products in order to maintain standards of quality.

The limestone and dolomite beds form an isolated mountain having a maximum elevation of 1,000 feet above the surrounding terrain. The limestone bed is about 150 feet thick and lies nearly horizontal. The overlying dolomite has an average thickness of about 600 feet. Both the limestone and dolomite are dense and uniform in composition so that selective mining is not necessary. The composition of the limestone and dolomite averages as follows:

Limestone	Percent	Dolomite	Percent
MgCO3	1.72	MgCO3	44.35
SiO2	72	Si02	
Fe ₂ 0 ₃ ; Al ₂ 0 ₃	•45	Fe203; Al203	•37
CaCO ₃	97.11	CaCO3	
Total		Total	

5883