

THE DUVAL CORPORATION

The Duval Corporation of Houston, Texas, electrified the mining industry—and the State of Nevada—in 1964 with the announcement that it had completed field work and drilling in the old Copper Canyon and Copper Basin mining districts of Lander County, and would begin evaluation of its properties with a view to establishing a new multimillion dollar mining operation.

On the basis of successful evaluations, stripping operations began in Copper Basin late in 1965, and plans were announced for an investment of \$22,000,000 to mine and mill the proven copper-gold-silver values.

Two months later, in January of 1966, Duval began stripping properties in Copper Canyon, to make this one of the largest combined operations in the State.

During the following months 23 million tons of overburden were removed from the two areas, 16 million from Copper Basin and the remaining 7 million from Copper Canyon. At the same time, construction began on a 3,000-ton-per-day flotation mill and leaching plant. The mill was placed in operation in March, 1967.

The mining part of the Duval operation is similar to that at Carlin: the ore is broken by blasting and loaded into trucks by large power shovels to be hauled to the treating plants. The milling part of the operation is different. Some of the ore, in which the copper values occur as sulfides, is treated in the flotation mill, which separates the copper-bearing sulfide into concentrates that are then shipped to a smelter for reduction to metallic copper. Other ore, in which the copper occurs as oxides, is stacked in huge piles that are continuously sprinkled with acid solutions, which dissolve out the copper content. The solutions are caught at the bottoms of the piles, and the copper is precipitated from them to make an impure metallic copper product for shipment to smelters for final treatment.

The Duval venture is one of several major mining operations initiated in Nevada in the past five years as a result of the combined efforts of Federal and State agencies working with private industry to locate and produce minerals badly needed by our economy.