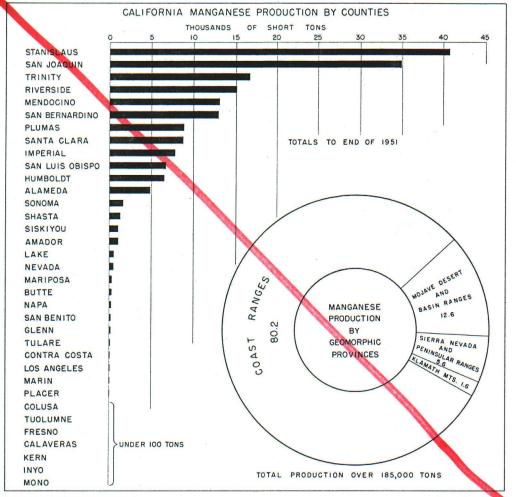
California State Division of Mines

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ITEM 25



LEVIATHAN SULFUR MINE

The Leviathan mine is located in Alpine County about 7 miles airline east of Markleeville. During the summer of 1952 the Anaconda Copper Mining Company acquired the property and contracted stripping operations to uncover a large body of sulfur ore.

The ore body is essentially horizontal except at its western margin where the body assumes a gentle easterly dip. The long axis of the ore body trends northward. The native sulfur occurs disseminated throughout a gray, fine-grained-to-glassy volcanic rock. The sulfur is predominantly a bright canary yellow color, although some of it is black.

Strip mining of the overburden began in 1952. This work is done by a contractor who uses three power shovels, the largest of which is equipped with a 6-cubic yard bucket. A maximum of 350 feet of overburden is to be stripped from the orebody. Thirty-foot benches are maintained in stripping the waste, and 15-foot benches are used in mining the orebody. The mining and loading are done by the company and the ore is delivered to a transportation contractor who hauls the ore to a sulfuric acid plant at Yermington, Nevada, 55 miles away. The sulfur ore is crushed and roasted for the manufacture of sulfuric acid, and the latter will be used to leach copper from a company-owned low grade copper deposit.

GARNET HILL TUNGSTEN MINE

The Garnet Hill tungsten mine is located on Garnet Hill between Moore's Creek and the North Fork of the Mokelumne River in Calaveras County.

Scheelite occurs in a north-trending tactite vein that is from 15 to 50 feet wide and crops out for a linear distance of at least 150 feet. The vein, which consists principally of massive to crystalline garnet with some epidote, is located in a roof pendant of meta-sediments and meta-volcanics. Minor amounts of molybdenite and chalcopyrite are present. Two smaller scheelite-bearing tactite veins crop out within 150 yards east of the main vein. To date no development work has been done on these veins. Recent stripping has indicated that the middle vein may intersect the main vein near the top of Garnet Hill.

The property is mined by an open pit. The main vein has been mined 100 feet along the strike at an average width of 25 feet and to a maximum depth of 15 feet. The ore is trucked about 60 miles to the Church mill two miles south of El Dorado.

At the mill, the ore is deposited onto a 10-inch grizzly and falls into a skip which is located in the old Church mine shaft. The skip is then