

The lake brines at Trona, San Bernardino County, also yielded natural sodium sulfate.

**Stone.**—Stone was mined in 45 of the State's 58 counties in 1952. Production increased 15 percent in quantity and 20 percent in value compared with 1951.

TABLE 29.—Stone, commercial and noncommercial, sold or used, 1951–52, by uses

Use	1951		1952	
	Quantity	Value	Quantity	Value
Dimension stone:				
Construction and rubble..... short tons..	15,343	\$75,281	39,916	\$163,800
Architectural..... cubic feet..	4,683	79,929	40,075	174,262
Approximate equivalent in short tons.....	378		3,259	
Monuments and mausoleums..... cubic feet..	32,947	241,074	35,266	254,777
Approximate equivalent in short tons.....	2,701		2,892	
Flagging..... cubic feet..	14,822	28,318	7,529	11,000
Approximate equivalent in short tons.....	1,256		640	
Total dimension stone (quantities approximate, in short tons).....	19,678	424,602	46,707	603,839
Crushed and broken stone:				
Riprap..... short tons..	481,284	710,830	994,892	1,470,061
Metallurgical..... do..	277,807	635,099	86,481	251,912
Concrete and road metal..... do..	8,489,478	8,321,258	9,984,529	10,361,036
Railroad ballast..... do..	543,667	407,358	526,654	404,843
Agricultural..... do..	339	1,629	279	1,719
Chemical..... do..	497,353	1,163,485	506,661	1,210,942
Miscellaneous <sup>1</sup> ..... do..	2,227,738	3,050,263	2,228,727	3,392,733
Total crushed and broken stone..... do..	12,517,666	14,289,922	14,328,223	17,093,246
Grand total (quantities approximate, in short tons).....	12,537,344	14,714,524	14,374,930	17,697,085

<sup>1</sup> Includes whiting or whiting substitute, filler, mineral food, poultry grit, stucco, roofing granules, filter beds, terrazzo, and miscellaneous uses.

**Strontium Minerals.**—A small quantity of strontium ore, mined in Imperial County, was used in 1952 for preparing strontium carbonate.

**Sulfur.**—Minor tonnages of sulfur ore, which averaged 25 percent sulfur, were shipped for direct agricultural use from deposits in Inyo County. The Anaconda Copper Mining Co. developed sulfur at the Leviathan mine in Alpine County for its Yerington, Nev., sulfuric acid plant. The Chemi-Cal Corp. developed a deposit of sulfur in Lake County. Byproduct sulfur as brimstone and in acid sludge was recovered at California oil refineries. Sulfuric acid was produced as a byproduct of the smelting of sulfide ores at Selby, Contra Costa County. It also was obtained at various oil refineries by using the sulfur contained in hydrogen sulfide gas evolved in the refining process.

**Talc, Pyrophyllite, and Soapstone.**—Total crude talc, pyrophyllite, and soapstone mined in California in 1952 was 5 percent below 1951. Most of the crude-talc output came from Inyo County, although substantial production was reported from San Bernardino County. Pyrophyllite was mined in Mono and San Bernardino Counties. Los Angeles, Inyo, and El Dorado County deposits were worked for soapstone. Of the ground material prepared at California mills, 52 percent was consumed in ceramics, 21 percent in paint, 10 percent in insecticides, and 17 percent in miscellaneous items, including asphalt filler,



California's industry on 1952 the State scrap compared to 27 percent of when California scrap and only 1 percent as influenced largely at the Kaiser

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## ALPINE

**Hope Valley District.**—Carson Tungsten Co. worked the Valpine mine in 1952 and recovered 8 tons of scheelite concentrate, containing 507 units of  $WO_3$ , from 2,576 tons of ore milled in Nevada. R. D. Morris shipped scheelite concentrate produced from Alpine mine ore.

**Monitor (Mogul) District.**—Anaconda Copper Mining Co. prepared the Leviathan sulfur mine for production in 1952. According to the company report, "Expenditures in 1952 for construction, development, etc., amounted to \$13,381,909, increasing total at December 31, 1952 to \$16,240,649."

## AMADOR

**Cosumnes River District.**—Lorentz & Swingle dredged the Lorentz mine gravel, 7 miles northeast of Plymouth, with a  $1\frac{1}{4}$ -cubic-yard dragline excavator and a gasoline-powered Bodinson floating washing plant. Gold and silver were produced.

**East Belt District.**—Garibaldi Bros. worked the Garibaldi mine gravel on Pioneer and Sutter Creeks with dragline and trommel; 60 ounces of gold and 9 ounces of silver were recovered from 8,000 cubic yards of gravel washed.

**Mokelumne River (Lancha Plana, Camanche) District.**—Humacid Co. operated a plant near Camanche, designed for wax extraction, on lignite mined south of Lancha Plana for a short period in 1952. Glenn Modrell recovered gold and silver, using a dragline dredge, on the Brown property east of Camanche.

**Mother Lode District.**—Central Eureka Mining Co. operated the Old Eureka mine throughout 1952. Gold and silver were recovered by amalgamation and cyanidation from 28,200 tons of ore milled at the company 250-ton plant. Martin Ares worked the Keystone mine and produced gold and silver from 60 tons of ore amalgamated at the Centennial mill in Calaveras County.

**West Belt (Ione) District.**—Deposits of high-grade fire clay in the Ione area, one of the State's important sources of that material, were worked by Western Refractories Co., Pacific Clay Products, and Gladding McBean & Co. in 1952. Calaveras Cement Co. produced kaolin used in white portland cement prepared at its Calaveras County cement plant. Gladding McBean & Co., with Owens Illinois Glass Co., operated a pilot plant designed to separate Ione clays and silica sand. American Lignite Products Co. operated a lignite strip mine near Ione and processed the coal near Buena Vista, extracting principally montan wax and some natural iron oxide-pigment materials. The Copper Hill mine east of Plymouth was explored for copper ore.

## BUTTE

Mathews Ready Mix produced sand and gravel at Gridley. Natural gas was produced also in Butte County.

**Butte Creek (Nimshew) District.**—Thurman & Wright operated its dredge No. 3, an electric Bodinson floating washing plant and 5-cubic-yard power shovel, on the contiguous McLain, Statham Skillen, McEnespy, and Clark properties, terminating dredging December 12, 1952. Gold, silver, and crude platinum were recovered. Butte Creek Rock Co. operated a commercial rock crusher and sand plant