

TABLE 34.—Stone, commercial and noncommercial, sold or used, 1952-53, by uses

Use	1952		1953	
	Quantity	Value	Quantity	Value
Dimension stone:				
Rough construction and rubble.....short tons	39,916	\$163,800	11,431	\$44,645
Rough architectural and dressed stone.....cubic feet	40,075	174,262	9,492	92,808
Approximate equivalent in short tons.....	3,259		776	
Monuments and mausoleums.....cubic feet	35,266	254,777	29,571	148,823
Approximate equivalent in short tons.....	2,892		2,400	
Flagging.....cubic feet	7,529	11,000	3,133	4,617
Approximate equivalent in short tons.....	640		246	
Total dimension stone (quantities approximate, in short tons).....	46,707	603,839	14,853	290,893
Crushed and broken stone:				
Riprap.....short tons	994,892	1,470,061	872,172	1,539,269
Metallurgical.....do	86,481	251,912	63,021	185,092
Concrete and road metal.....do	9,984,529	10,361,036	10,434,506	10,771,937
Railroad ballast.....do	526,654	404,843	704,729	697,948
Agricultural.....do	279	1,719	1,095	3,488
Chemical.....do	506,661	1,210,942	614,076	1,896,794
Miscellaneous ¹do	2,228,727	3,392,733	1,809,728	3,093,731
Total crushed and broken stone.....do	14,328,223	17,093,246	14,499,327	18,188,259
Grand total (quantities approximate, in short tons).....	14,374,930	17,697,085	14,514,180	18,479,152

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

Strontium Minerals.—Pan Chemical Co. produced a small tonnage of celestite in the Fish Mountain district, San Diego County.

Sulfur.—Sulfur-ore output in 1953 was the largest ever attained in the State. Other than a relatively small tonnage of sulfur ore mined in Inyo County for soil conditioning, the 1953 California production was from the Anaconda Copper Mining Co. Leviathan open-pit mine in Alpine County. The ore, which contained an average of 25 percent sulfur, was shipped to Yerington, Nev., for sulfuric acid manufacture. There was some development during 1953 at a sulfur deposit near Bartlett Springs, Lake County. Brimstone was recovered as a byproduct in the liquid purification of gas by oil companies in Los Angeles County. Hydrogen sulfide having a total sulfur content of 59,175 tons was obtained at oil refineries in the refining process in Los Angeles and Contra Costa Counties. The American Smelting & Refining Co. recovered liquid sulfur dioxide as a byproduct of the smelting of sulfide ores at Selby, Contra Costa County, and sulfur paste and sludge from spent acid were shipped to chemical plants from oil refineries in Contra Costa County.

Talc, Pyrophyllite, and Soapstone.—Production of crude talc, pyrophyllite, and soapstone increased 5 percent in quantity over 1952, but no direct comparison can be made in value, as the 1953 figure is "mine value," and the 1952 value pertains to ground material. Of the total crude California material mined in 1953, 56,750 tons valued at \$679,674 was produced in San Bernardino County (talc and pyrophyllite), 48,006 tons valued at \$382,171 in Inyo County (talc), and the remainder (21,686 tons valued at \$70,855) in Los Angeles County (soapstone), El Dorado County (soapstone), Mono County (pyrophyllite), and Riverside County (pyrophyllite). Grinding mills were

TABLE 38.—Mineral production in California in 1953, by counties—Continued

County	Value	Minerals produced, in order of value
Sacramento.....	\$23,241,371	Natural gas, sand and gravel, gold, stone, clays, platinum, silver.
San Benito ¹	4,935,596	Cement, stone, mercury, petroleum, sand and gravel, natural gas, clays.
San Bernardino ¹	59,704,292	Cement, sodium carbonate, boron minerals, potassium salts, sodium sulfate, sand and gravel, stone, rare-earth metals concentrate, tungsten concentrate, talc and pyrophyllite, salt, calcium-magnesium chloride, iron ore, clays, lime, lithium salts, bromine, petroleum, silica (quartzite), gold, copper, barite, perlite, pumice, feldspar, silver, natural gas, lead, zinc, gypsum.
San Diego.....	5,377,292	Sand and gravel, stone, salt, magnesium compounds, clays, tungsten concentrate, strontium ore, gold, silver.
San Joaquin ²	2,829,307	Sand and gravel, natural gas, stone, manganese ore, clays.
San Luis Obispo ³	12,734,672	Petroleum, natural-gas liquids, chromite, natural gas, sand and gravel, stone, gypsite, mercury.
San Mateo.....	7,941,478	Cement, stone, magnesium compounds, sand and gravel, gold.
Santa Barbara.....	97,004,337	Petroleum, diatomite, natural-gas liquids, natural gas, sand and gravel, clays, stone, chromite.
Santa Clara.....	23,535,780	Cement, stone, sand and gravel, chromite, mercury, clays, magnesite, petroleum.
Santa Cruz.....	6,378,618	Cement, sand and gravel, stone, potassium salts.
Shasta.....	911,585	Pyrites, sand and gravel, stone, copper, gold, chromite, iron ore, silver.
Sierra.....	760,584	Gold, silver, copper.
Siskiyou.....	1,061,288	Chromite, sand and gravel, volcanic cinders, gold, pumice, stone, silver, asbestos, lead.
Solano.....	10,922,549	Natural gas, stone, clays, sand and gravel.
Sonoma.....	2,232,930	Sand and gravel, stone, mercury, petroleum, manganiferous ore, natural gas, chromite.
Stanislaus.....	494,547	Sand and gravel, clays, mercury.
Sutter.....	209,124	Natural gas, clays, sand and gravel.
Tehama.....	190,702	Chromite, sand and gravel, stone.
Trinity ¹	298,600	Gold, sand and gravel, stone, chromite, manganiferous ore, manganese ore, silver.
Tulare.....	1,834,073	Natural gas, sand and gravel, tungsten concentrate, stone, clays, petroleum, lead, silver, zinc.
Tuolumne ²	972,399	Lime, stone, sand and gravel, gold, tungsten concentrate, asbestos, silver.
Ventura.....	163,698,504	Petroleum, natural-gas liquids, natural gas, sand and gravel, stone, clays, gypsum.
Yolo.....	1,653,858	Sand and gravel, natural gas, stone, mercury.
Yuba.....	1,957,386	Gold, sand and gravel, platinum, silver.
Undistributed.....	953,633	Gem stones, stone, tungsten concentrate.
Total.....	1,392,975,000	

¹ Included with "Undistributed" to avoid disclosure of mine output.² 1953 mine production of chromite from Calaveras and Tuolumne counties not included. Concentrate was unsold and in stock.³ Excludes value of manganese and manganiferous ores sold and blended at Government low-grade stockpiles for future beneficiation.

ALPINE

Hope Valley District.—Tungsten ore was shipped by Don Burgner (Alpine mine), W. W. Whitney (Empire mine), and Carson Tungsten Co. (Valpine mine) to custom mills.

Monitor (Mogul) District.—Anaconda Copper Mining Co. produced 151,500 long tons of 25-percent sulfur ore from the Leviathan open-pit mine. The material was to be consumed in the sulfuric acid plant of the company Yerington, Nev., acid-leaching copper project.

AMADOR

Cosumnes River District.—C. J. Lorentz operated a dragline and floating washing plant at the Lorentz mine and recovered gold and silver from the gravel. Sand was produced for a State highway project by contractors.