

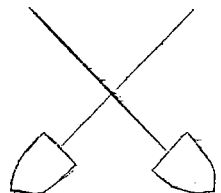
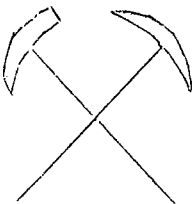
MINERALS REPORT 6

MINERAL PRODUCTION IN SOUTH DAKOTA
IN 1959

Prepared by the
U. S. Bureau of Mines
in cooperation with the
South Dakota State Geological Survey

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MINERAL PRODUCTION IN SOUTH DAKOTA IN 1959

PRELIMINARY ANNUAL FIGURES

South Dakota mineral production in 1959 was valued at \$44.6 million, an increase of 7 percent over 1958.

Nonmetal production represented 52 percent of the total value of the State's mineral production and was 14 percent greater than in 1958. Major gains in value of production were noted in cement, clays, and sheet mica.

Value of metal production was 1 percent greater than in 1958 but represented only 48 percent of the value of the State's mineral production. Major declines in value of beryllium concentrate and silver were noted, and only a modest increase in the value of gold production.

Petroleum production advanced 47 percent in value compared with 1958 but the value of coal (lignite) output increased only a modest 3 percent.

NONMETALS

Portland-cement shipments increased 23 percent compared with 1958. Installation of a new kiln and auxiliary equipment at the State-owned plant at Rapid City increased annual capacity to approximately 3.3 million barrels. The plant, operated by the State Cement Commission, is the only State-owned installation of this kind in the Nation. The Commission produced limestone, shale, and gypsum used at the plant from deposits near Rapid City.

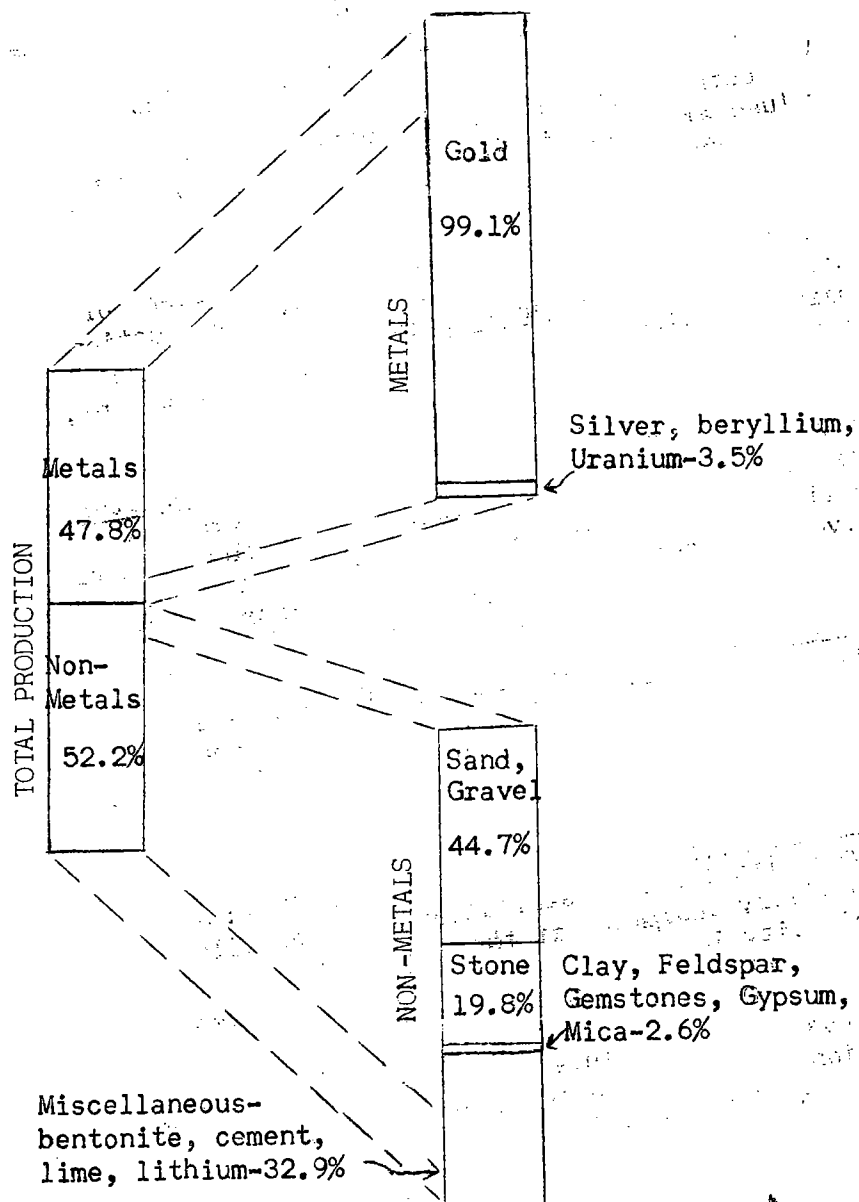


Figure 1.--Value of Mineral Production, 1959

Production of miscellaneous clays, for the manufacture of cement and lightweight aggregates at Rapid City, and building brick and heavy clay products at Belle Fourche, was 24 percent greater than in 1958. Bentonite, largely from deposits in Wyoming, was processed at mills at Belle Fourche.

The new feldspar grinding plant of Consolidated Feldspar Department, International Minerals and Chemical Corp., at Custer operated the entire year, processing the stockpiled material accumulated in the last half of 1958 during reconstruction of the plant that was destroyed by fire in July. The stockpile provided a substantial quantity of crude feldspar for grinding, and the demand for additional material declined. Production of crude feldspar was 10 percent below that of 1958.

The quantity of sheet mica recovered at the processing plant at Custer operated by General Services Administration (GSA) was two and one-half times more than in 1958. The value, however, was only 60 percent greater.

Sand and Gravel, used largely in the construction of highways, increased 3 percent in quantity and value compared with 1958. Progress of highway construction through Federal assistance as reported ^{1/} by the United States Department of Commerce, Bureau of Public Roads, shows that 0.5 miles of the National System of Interstate and

^{1/} United States Department of Commerce, Bureau of Public Roads, Status of Federal-Aid Highway Programs, October 1959: BPR 59-23.

TABLE 1.--Mineral production in South Dakota, 1958-59 1/

Mineral	1958		1959 (preliminary)	
	Short tons (unless other- wise stated)	Value (thousands)	Short tons (unless other- wise stated)	Value (thousands)
Beryllium concentrate-----gross weight-----	240	\$129	160	\$86
Clays 2/-----thousand short tons-----	155	133	192	192
Coal (lignite)-----do-----	20	78	20	(3)
Columbium-tantalum concentrate-----pounds-----	4,294	10		
Feldspar-----long tons-----	23,229	145	21,000	134
Gem stones-----	(4)	16	(4)	20
Gold (recoverable content of ores, etc.) troy ounces-----	570,330	19,979	574,000	20,090
Gypsum-----thousand short tons-----	12	49	12	50
Mica:				
Scrap-----	1,003	24	(3)	(3)
Sheet-----pounds-----	16,772	68	40,000	109
Sand and gravel-----thousand short tons-----	14,705	9,179	15,100	9,500
Silver (recoverable content of ores, etc.) thousand troy ounces-----	153	138	124	112
Stone-----thousand short tons-----	1,395	4,095	1,400	4,200
Uranium ore-----	35,489	530	46,000	658
Value of items that cannot be disclosed: Bentonite, cement, lime, lithium minerals, petroleum, and values indicated by footnote 3-----		7,555		10,133
Total 5/-----		41,534		44,646

1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

2/ Excludes bentonite; value included with items that cannot be disclosed."

3/ Figure withheld to avoid disclosing individual company confidential data; value included with "Items that cannot be disclosed."

4/ Weight not recorded.

5/ Total has been adjusted to eliminate duplication in the value of raw materials used in the manufacture of cement and lime.

Defense Highways, 356.3 miles of the National System under the special program to accelerate construction of the system authorized by the Federal-Aid Highway Act of 1958, and 895.1 miles of the Federal-Aid program for Primary, Secondary, and Urban Systems were completed in the 12-month period ending October 31, 1959. Pete Lien & Sons awarded a contract for the construction of a modern aggregate plant at Rapid City. The plant will produce all sizes of products from pit-run gravel for use in highway construction, concrete, concrete block, asphalt paving material, and various sizes of chip material.

Crushed limestone was produced in the western counties for cement manufacture, road construction, and concrete aggregate. Dimension granite for building and monuments was produced at quarries in Grant County. Stone production was slightly higher than in 1958. Total value of stone production increased 3 percent.

METALS

Gains were recorded in the production of gold (1 percent) and uranium ore (30 percent), and declines in beryllium concentrate (33 percent) and silver (19 percent) compared with 1958. With termination of the purchase program for columbite-tantalite concentrate by GSA in 1958, no sales were recorded in 1959. Bald Mountain Mining Co. ceased operation at its gold mines at Trojan in July for an indefinite period. The ore mined contained only about \$5 worth of gold per ton, an insufficient amount to provide a margin of profit because of increasing operating costs. The Bald Mountain mines were

the major source of silver in the State, and the shutdown accounted for the drop in production of that metal. Operations of the Homestake Gold Mining Co. at Lead continued, and increased production of gold more than offset the loss owing to the shutdown at Trojan. The Colorado Fuel and Iron Corp. explored iron deposits at Nemo by drilling. Plans were announced for development of the deposits and construction of a \$15 million beneficiation plant within the next 7 or 8 years.

MINERAL FUELS

Coal (lignite) production from mines in Dewey County continued at the same rate as in 1958. Petroleum production from fields in Harding County increased 52 percent in quantity and 47 percent in value compared with 1958. Exploratory and development drilling was nearly 50 percent greater than in 1958. Most of the drilling was in Harding County adjacent to the Buffalo field. The State Geologist reported five discoveries in 1959. The successful drilling generated new interest in the area and stimulated leasing. All production has been from the Red River (Ordovician) formation. A significant factor in development was the extension of the field southward from the original discovery at the Buffalo field as indicated by recent discoveries. At the end of 1959 there were 15 producing wells, and 5 additional possible producers were waiting on completion rigs.