The Mineral Industry of South Dakota

This chapter had been prepared under a Memorandum of Understanding between the Bureau of Mines, U.S. Department of the Interior, and the South Dakota Geological Survey for collecting information on all nonfuel minerals.

By James H. Aase¹

The value of nonfuel minerals produced in South Dakota during 1982 was \$135.7 million, the lowest level since 1978, and a 30% decrease from that of 1981. The main cause of this decrease was the drop in gold output effected by a 118-day miners' strike at the Homestake gold mine at Lead. Gold dropped an average of \$84 per ounce from the 1981 level, and the quantity produced was the least of any year this century, except for a period during World War II when the Federal Government curtailed gold mining nationwide.

The State's nonfuel mineral output was derived from 3 metallic and 11 nonmetallic

mineral commodities. Gains in quantity and value over those of 1981 were recorded in the production of beryllium concentrate, cement, common clay and shale, and gypsum. Gold, the leading commodity in value, accounted for 51% of the State total, followed by cement, 21%; dimension stone, 12%; sand and gravel, 6%; and beryllium concentrate, clays, feldspar, gem stones, gypsum, lime, scrap mica, silver, and crushed stone accounted for the remainder.

Accounting for less than 1% of the U.S. total, the State was ranked 34th in value of nonfuel mineral production.

Table 1.—Nonfuel mineral production in South Dakota¹

	19	81	1982		
Mineral	Quantity	Value (thou- sands)	Quantity	Value (thou- sands)	
Cement: Masonry	6 450 116 NA 278,162 e4,285 56	\$454 23,290 209 70 127,854 *9,224 587	520 128 NA 185,038 3,816 26	\$383 27,978 346 70 69,558 8,604 209	
Crushed thousand short tons Dimensiondo Combined value of beryllium, clays (bentonite), feldspar, gypsum, lime, and mica (scrap)	2,985 50 XX	9,085 17,543 6,382	P2,600 P48 XX	P7,400 P16,270 4,855	
Total	XX	r194,698	XX	135,673	

Estimated. PPreliminary. Revised. NA Not available. XX Not applicable.

¹Production as measured by mine shipments, sales, or marketable production (including consumption by producers). ²Excludes bentonite; value included with "Combined value" figure.

Among the various mineral commodities produced during the year, the value of gold produced in South Dakota ranked 2d among 12 States; dimension stone, 3d of 38; feld-spar, 6th of 6; mica, 6th of 7; silver, 14th of

16; gypsum, 19th of 22; cement, 27th of 40; clays, 29th of 44; lime, 29th of 39; crushed stone, 39th of 48; and construction sand and gravel, 42d of 50.

Table 2.—Value of nonfuel mineral production in South Dakota, by county¹
(Thousands)

County	1980	1981 ²	Minerals produced in 1981 in order of value
leadle	\$54	(a)	~
Prookings	463	ල ල . ල	Section 1997
brown	278	. (6)	· ·
Brule	w	(6)	
utte	w '	w	Clays.
ampbell	w	Ä	Olays.
harles Mix	227	8	
lark	76	ල ල ල ල	
	48	Ω,	·
lay		9	
odington	W	9	
oreon	<u>10</u>	20(*)	
uster	_₩	\$647	Stone (crushed), feldspar, mica, beryllium.
avison	246	@	
ay	82	· 🐧	
éuel	95	(4)	
ouglas	W	(4)	
all River	433	470	. Stone (crushed).
aulk	67	(1)	
rant	W	17,543	Stone (dimension).
regory	218	(A)	
amlin	W	<u>بر</u>	•
and	Ŵ	A	
anson	₩	. \	Stone (crushed).
	· ₩		Stone (crushed).
	w	(2)	grand the state of
utchinson		. 😯	
yde	50	(A)	
rauld	43,	(*)	
nes	. 81	(*)	, .
ingsbury	W	(9)	
ake	222	(9)	· · · · · · · · · · · · · · · · · · ·
awrence	166,606	· W	Gold, silver, stone (crushed).
man	49	(*)	
cPherson	W	· (6)	9 ÷
arshall	· W) A	
leade	Ŵ	. ÌŚ	Stone (crushed).
iner	85	<u> </u>	
innehaha	3.586	2.995	Stone (crushed).
oody	W	2,000	Diotro (cramitati).
ennington	w ·	32.807	Cement, lime, stone (crushed), clays, gypsum,
minigon	** .	02,001	mica.
erkins	· w	A	ma.
otter	67	Ω.	**
	W	· 🙎	
oberts		Q	
nborn	W	•	
oink	W	. •	
ully	847	.	
ripp	220	()	entropy of the control of the contro
urner	74	(
nion	79	. /	
alworth	43	` `	
enkton	w	₩.	Stone (crushed).
ndistributed4	54,109	180,998	manten (at employ).
and and gravel (construction)	XX	9,224	
		<i>0,66</i> 4	* * * *

[®]Estimated. W Withheld to avoid disclosing company proprietary data; included with "Undistributed." XX Not applicable.

Table 3.—Indicators of South Dakota business activity

	1981	1982 ^p	Change, percent
Employment and labor force, annual average:			
Total civilian labor force thousands_	335.0	328.0	-2.1
Unemploymentdo	17.0	18.0	+5.9
Employment (nonagricultural):			
Mining ¹ do	2.9	2.3	-20.7
Manufacturingdo	25.9	25.0	-3.5
Contract construction do	9.7	7.8	-19.6
Transportation and public utilities	12.8	12.5	-2.3
Transportation and public utilitiesdodo	63.9	61.8	-3.8
Finance, insurance, real estatedodo	11.4	11.8	+3.5
Servicesdodo	51.6	52.3	+1.4
Governmentdo	57.8	56.6	-2.1
Total nonagricultural employment ¹ do	236.0	230.1	-2.5
Personal income:			
Total millions _	\$6,059	\$6,564	+8.3
Per capita	\$8,837	\$9,506	÷7.6
Construction activity:			•
Number of private and public residential units authorized	1,502	1,360	-9.5
Value of nonresidential construction millions _	\$69.9	\$54.2	-22.5
Value of State road contract awardsdodo	\$60.5	\$78.0	+28.9
Shipments of portland and masonry cement to and within the State			
thousand short tons	243	197	-18.9
Nonfuel mineral production value:			
Total crude mineral value millions_	\$194.7	\$135.7	-30.3
Value per capita, resident population	\$280	\$196	-30.0
Value per square mile	\$2,510	\$1,761	-29.8

Preliminary.

Sources: U.S. Department of Commerce, U.S. Department of Labor, Highway and Heavy Construction Magazine, and U.S. Bureau of Mines.

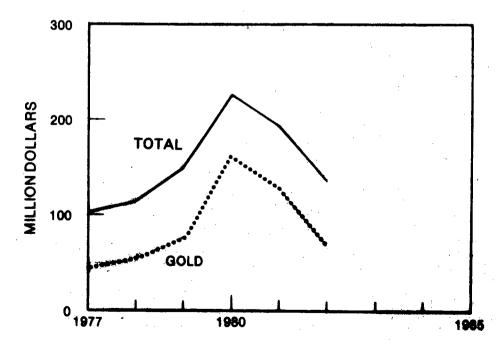


Figure 1.—Value of mine production of gold and total value of nonfuel mineral production in South Dakota.

¹The following counties are not listed because no nonfuel mineral production was reported: Aurora, Bennett, Bon Homme, Buffalo, Dewey, Edmunds, Haakon, Harding, Jackson, Lincoln, McCook, Mellette, Shannon, Stanley, Todd, and Ziebach.

^{*}County distribution for construction sand and gravel is not available; total State value shown separately under "Sand and gravel (construction)."

*Construction sand and gravel was produced; data not available by county.

[&]quot;Construction sand and gravel was produced; data not available by county.

Includes gem stones, sand and gravel that cannot be assigned to specific counties (1980) and values indicated by symbol

⁵Data may not add to totals shown because of independent rounding.

¹Includes oil and gas extraction.

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Trends and Developments.—In late March, Homestake Mining Co. reduced its work force at the gold mining operation in Lead; the elimination of 33 jobs marked the first time since 1942 that anyone had been laid off at the mine. The company indicated that the reduction was due to falling gold prices and the company's attempt to keep the mine at a break-even point.

Near midyear, Homestake announced plans for an open pit gold mine near the surface facilities of its current underground mine. Known locally as the "opencut," the site was the original gold discovery area and was worked to shallow depths by both open pit and underground methods in earlier years. Ore is to be crushed at the site and hauled to the company's nearby mill in Lead for processing. About 25 million tons of waste rock must be removed to reach the ore at a depth of about 450 feet.

In early spring, the State-owned cement plant in Rapid City, the only cement-manufacturing facility in South Dakota, cut its production in half because of slow sales. The "wet process" side of the plant, which accounts for about one-half of the plant's production capacity, was shut down; however, production continued on the "dry process" side.

A slowdown in oilfield activities and in the steel industry caused American Colloid Co., which mines and processes bentonite near Belle Fourche, to cut back production and lay off workers during the year. About midyear, the company started operating on a reduced workweek. In early August, the austerity went one step further when the company laid off a substantial number from its work force.

The National Sand & Gravel Association honored Birdsall Sand & Gravel Co. Inc., Rapid City, for its safety accomplishments. The company's Wasta plant was the national winner of the Association's 1981 safety contest for Class F size operations (those producing less than 60,000 tons annually).

A 118-day strike by about 1,300 production, and maintenance workers at the Homestake gold mine ended on September 26 when members of United Steelworkers of America Union Local 7044 and Homestake agreed on a new 44-month contract. Over the next 3 years, the contract gives miners raises of 6%, 7%, and 8%, plus an improved gold bonus, pension plan, and better vacation and insurance benefits than the previous contract provided. The strike, the second and longest in the mine's 106-year

history, caused an economic pinch in the northern Black Hills where Homestake has a monthly payroll of about \$3 million. The strike also cost South Dakota an estimated \$2 million in lost gold severance taxes.

Exploration activities for nonfuel minerals remained at nearly the same level as in 1981. In 1982, the State issued 14 permits to firms interested in nonfuel mineral exploration, principally for precious metals.

Additionally, the State issued approximately 50 mining permits to various firms and government agencies planning mining operations within South Dakota. Except for three permits—two to mine gold, one each in Custer and Lawrence Counties, and another to mine tin, tantalum, and mica in Lawrence County—all others were for extracting rock and aggregate-related materials.

Employment.—According to figures from the South Dakota Department of Labor in its monthly Labor Bulletin, average employment in the State's mining industry during 1982 totaled 2,300 workers, a decrease of approximately 21% compared with that of 1981. On the average, mining-industry workers accounted for about 1% of the State's total nonagricultural work force. Average weekly earnings of mining employees during the last quarter of 1982 were approximately \$398, a 4% decrease from the average weekly earnings during the same period of 1981.

Legislation and Government Programs.—The South Dakota Legislature enacted a number of bills during its 1982 session that affect the mining industry and mineral-resource development in the State. Highlights of the legislation were a comprehensive rewriting of the State's mining laws, added protection for surface owners without mineral rights to their land, and the moderation of requirements for permits and hearings to encourage mineral exploration. Bill numbers and titles covering this legislation included the following: HB 1001-Mineral Mining and Milling; HB 1002—Mineral Exploration; HB 1003— Uranium Exploration; and HB 1004-Compensation to Property Owners.

In the Federal fiscal year 1982, the State received nearly \$1.3 million from the U.S. Department of the Interior as its 50% share of receipts that the Federal Government collected within the State under the Mineral Leasing Act of 1920. The monies were derived from mineral leasing rents, royal-

ties, and bonuses on Federal lands.

Effective July 1, 1982, all reponsibility for administering the State's oil and gas activities was transferred from the South Dakota Geological Survey to the State's Office of Minerals and Mining, Department of Natural Resources. The transfer was designed to consolidate State regulatory functions.

The Mining and Mineral Resources and Research Institute at the South Dakota School of Mines and Technology in Rapid City, which was created under title III of Public Law 95-87, received \$150,000 in fiscal year 1982 for operations and research from the U.S. Bureau of Mines.

REVIEW BY NONFUEL MINERAL COMMODITIES

METALS

Beryllium.—Three producers in Custer County reported hand-cobbed beryllium concentrate output. Although the quantity and value of the 1982 production exceeded that of 1981 by more than 200%, total output remained small.

Gold.—South Dakota gold produced during 1982 decreased 33% in quantity and 46% in value compared with 1981 figures. Accounting for 13% of the total U.S. gold production in 1982, the State's entire reported output came from Homestake's underground mining operation at Lead. The recovery grade of gold from the 1.1 million metric tons of lode mine ore milled during the year increased from 0.15 ounce per ton in 1981 to 0.16 ounce per ton.

According to the Homestake 1982 annual report, ore reserves at the Homestake Mine in Lead were 17,518,000 tons with an average grade of 0.22 ounce per ton. The average cost per ounce of gold produced

during the 8 months of operation in 1982 was reduced to about \$300, compared with \$342 in 1981. Standby costs of almost \$9 million during the strike increased the overall cost per ounce of gold production by \$48 to \$348 per ounce. Exploration work at Homestake's Lead operation in 1982 was intensified in the old opencut workings to define low-grade reserves that offer potential benefits through surface mining. A \$4.8 million drilling program was undertaken to confirm reserves in the opencut area. All permits required to conduct surface mining operations at the site were obtained near midyear. The company said commercial development would depend on the results of additional engineering studies.

Work that began during the year to raise Homestake's Grizzly Gulch tailings disposal dam 50 feet to increase its storage capacity is to be completed by mid-1983. An additional 50 feet of lift is contemplated by 1992, with the option of adding yet another 50 feet after the turn of the century.

Table 4.—South Dakota: Mine production of gold and silver in terms of recoverable metal

	Mines pro	oducing	Material sold or	Gold (lode	Gold (lode and placer)		Silver (lode and placer)		
Year	Lode	Placer	treated¹ (thousand metric tons)	Troy ounces	Value (thousands)	Thousand troy ounces	Value (thousands)		
1978 1979 1980 1981 1982 1982	1 1 1 1	 1 1	1,442 1,297 1,621 1,677 1,059	285,512 245,912 267,642 278,162 185,038	\$55,261 75,618 163,947 127,854 69,558	53 58 51 56 26	\$287 643 1,058 587 209		
1876-1982	NA	NA	NA	37,993,771	1,746,669	13,531	14,810		

NA Not available.

1Excludes placer gravel.

Silver.—Compared with 1981 figures, silver production, all obtained as a coproduct with gold produced at the Homestake Mine at Lead, decreased 54% in quantity and 64% in value. The average price of silver dropped to \$7.95 per ounce in 1982, \$2.57 per ounce less than in 1981.

NONMETALS

Cement.-All cement manufactured in South Dakota during 1982 came from the State-owned plant in Rapid City. This output. consisting of three types of portland cement and a prepared masonry cement. decreased 9% in quantity and 6% in value from that of 1981. The unit price of the portland and masonry cement marketed rose to record highs of \$53.77 and \$88.66 per ton, respectively. With a rated production capacity of about 1.1 million tons per year when utilizing its three wet-process and one dry-process kilns, the plant operated at less than one-half of capacity for the year. Most of the 1982 production was from the dryprocess side of the plant. Approximately 1.1 million tons of State-produced nonfuelsincluding clay and shale, gypsum, iron ore, limestone, and sand-was consumed in manufacturing the cement produced.

During the year, plant officials opened new sales and distribution terminals in Casper, Wyo., and Denver, Colo., and developed a new rail distribution plant in North Dakota.

Ready-mix companies were the largest end users of the portland cement manufactured, accounting for approximately 55% of the 1982 shipments. Shipments of portland cement from the plant were handled 91% by truck and the remainder by rail. Approximately 96% of these shipments were in bulk form.

Clays.—Crude bentonite, from South Dakota and out of State, was processed at American Colloid Co.'s plant near Belle Fourche in Butte County, Output of the processed material decreased both in quantity and value compared with that of 1981. mainly because of reduced activities within the oil and steel industries, principal consumers of the processed material. Other uses of the material marketed in 1982 included animal feed, waterproofing, and a host of miscellaneous uses. Among the various types of clay mined and/or processed in South Dakota during 1982, bentonite accounted for most of the total clay value credited to the State.

Pennington County by the State for use in manufacturing cement and by Dakota Block Co. to make an expanded aggregate used in concrete blocks and structural concrete products. The quantity and value of the 1982 production rose modestly over that. of 1981. The unit value of the material produced increased to a record high of \$2.70 per ton.

Feldspar.—Production of hand-cobbed feldspar dropped both in quantity and value from the 1981 level. The crude ore, obtained from several small mining operations in the pegmatite district of the southern Black Hills area, was processed at a grinding mill that Pacer Corp. operated in Custer. Shipments of the processed material went to markets in a dozen or more States. Canada. and Mexico. The bulk of the ground product was used in pottery with lesser amounts used in enamels.

Gem Stones.-No commercial gem stone mining operations were reported in South Dakota during 1982. The value shown in this chapter represents an estimate for material collected by rockhounds, mineral collectors, and other hobbyists.

Gypsum.—A single mine in Pennington County accounted for South Dakota's entire gypsum output in 1982. The State-operated mine produced crude material that was used exclusively in manufacturing cement at the State-owned cement plant in Rapid City. The quantity and value of the material mined increased significantly over that of

Lime.—Pete Lien & Sons Inc., the sole producer of lime in the State, produced hydrated lime and quicklime at a plant in Rapid City. Lime output during the year decreased moderately both in quantity and value compared with that of 1981. The average unit price of the lime marketed during 1982 remained at approximately the same level as that of 1981.

During 1982, 21,000 tons of lime, obtained from all domestic sources, was consumed within the State.

Mica.—Concepts West Inc. and Pacer Corp. produced a small amount of handcobbed mica from operations in Custer County. The average unit price of the material marketed in 1982 increased approximately 4% above the 1981 level.

Sand and Gravel.—Construction.—As a result of the new canvassing procedures implemented by the U.S. Bureau of Mines in 1980, no annual survey of construction Common clay and shale was mined in sand and gravel producers was conducted for 1981. Based on partial production information for 1981, collected with the 1982 survey, final estimates of construction sand and gravel production in 1981 were generated and are given in table 1.

The quantity and value of construction sand and gravel produced in 1982 decreased 11% and 7%, respectively, from levels attained in 1981. During the year, 86 firms and government agencies operated at 108 sites throughout 48 of the State's 66 counties. Eight companies, operating in 16 locations, produced in excess of 100,000 tons each during 1982 and collectively accounted for 47% of the State's output. Meade. Minnehaha, and Pennington Counties each recorded production in excess of one-

quarter million tons and collectively accounted for 29% of the State total.

Sand and gravel produced by individual companies during 1982 varied widely. Forty-one firms produced less than 25,000 tons: 36, between 25,000 and 100,000 tons: 6, between 100,000 and 200,000 tons; and 3, in excess of 200,000 tons.

In 1982, sand and gravel was predominantly used for road base and coverings, accounting for approximately 52% of the total. Other uses, in descending order of amount consumed, were for concrete aggregate, asphaltic concrete and other bituminous mixtures, fill, and other miscellaneous uses.

Table 5.—South Dakota: Construction sand and gravel sold or used by producers

	1981			1982			
· .	Quantity (thousand short tons)	Value (thou- sands)	Value per ton	Quantity (thousand short tons)	Value (thou- sands)	Value per ton	
Sand Gravel Sand and gravel (unprocessed)	NA NA NA	NA NA NA	NA NA NA	690 2,844 283	\$2,245 5,980 378	\$3.26 2.10 1.34	
Total ¹ or average	e4,285	e\$9,224	e\$2.15	3,816	8,604	2.25	

Estimated. NA Not available.

Table 6.—South Dakota: Construction and and gravel sold or used in 1982. by major use category

Use .	Quantity (thousand short tons)	Value (thou- sands)	Value per ton
Concrete aggregate	808	\$3,153	\$3.90
Plaster and gunite sands	6	29	4.58
Concrete products	W	10	W
Asphaltic concrete	640	1,334	2.09
Road base and coverings ¹	1,983	3,483	1.76
Fill	266	338	1.27
Snow and ice control	65	155	2.36
Raifroad ballast	W	78	w
Other	47	24	1.28
Total or average	² 3,816	8,604	2.25

W Withheld to avoid disclosing company proprietary data; included with "Other."
¹Includes road and other stabilization (cement).

¹Data may not add to totals shown because of independent rounding.

²Data do not add to total shown because of independent rounding.

Table 7.—South Dakota: Construction sand and gravel sold or used by producers. by county

		1980		1982		
County	Num- ber of mines	Quantity (thou- sand short tons)	Value (thou- sands)	Num- ber of mines	Quantity (thou- sand short tons)	Value (thou- sands)
Beadle	1	36	\$54	1	23	\$2
Son Homme			7.7	1	33	38
Brookings	3	144	463	1	w	W
Brown	6	146	278	2	70	18
Butte	2 3	W	W	1	24	3
harles Mix	នុ	130	227	3	79	15
lark	1	W	76	1	54	7:
lay	1	32	48	1	23	3
orson	1	6	10	1	5	1
uster	1	14	16			_
avison	5	134	246	1	W	v
8v	3	62	82	ī	48	8
euel	3	84	95	3	94	20
ewev	-			ĭ	26	4
all River		76	285	2	39	18
aulk	- <u>2</u> 1 5	41	67	ĩ	19	3
	Ė	128	218	. 4	81	14
regory	J	120	210			
		$\bar{\mathbf{w}}$	w	1	.9	1
	$\frac{-\overline{2}}{1}$			3	37	4
lanson	1	22	29	2	3	j
arding		7.7		2	40	4
lughes	2 1 2	24	w	1	3	
Iyde	1	50	50	3	54	10
erauld	2	32	43	3	22	3
ones	1	29	31	1	70	9
ake	2	w	222	2	93	31
vman	1	34	49			-
leade	1	w	w		$\overline{517}$	1,16
finer	2	32	35	2	w	-,-,v
finnehaha	ã.	595	864	- <u>-</u> 5 2 6	331	51
ennington	š	182	679	5	270	96
otter	ĭ	67	67	U	210	30
oberts	5	w	w		$1\bar{2}\bar{0}$	29
ully	5	84		í		
ripp	1	172	347	1	80	50
	3		215	-5	777	
urner Jnion		50	74	3	W	V
	3 2	70	79	3	68	7
Valworth		38	43	1	37	5
ankton Indistributed ¹	4	275	675	4	94	203
Indistributed'	^r 25	1,421	2,579	27	1,350	2,931
Total ²	109	4,209	8,243	108	3,816	8,604

^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Undistributed."

¹Includes Brule (1980), Campbell, Codington, Douglas, Grant, Hand, Hutchinson, Kingsbury (1980), Lawrence, McPherson, Marshall, Moody, Perkins, Sanborn, and Spink Counties, sand and gravel that cannot be assigned to specific counties, and data indicated by symbol W.

²Data may not add to totals shown because of independent rounding.

Stone.—To reduce reporting burdens and costs, the U.S. Bureau of Mines implemented new canvassing procedures for its survey of stone producers in 1981. The survey of stone producers will be conducted for oddnumbered years only, and only preliminary estimates for crushed and dimension stone production will be published for evennumbered years. The preliminary estimates will be revised and finalized the following year.

Crushed.-The estimated quantity of crushed stone produced during the year was slightly less than that of 1981 and 33% below the record level set in 1979.

Dimension.—Output of dimension granite in 1982 was estimated to have decreased 4% in quantity and 7% in value from the 1981 levels.

Table 8.—Principal producers

Commodity and company	Address	Type of activity	County
Beryllium concentrate:			
Bland Mining	Route 3, Box 18	Mines	Custer.
Stratton Mining Co	Custer, SD 57730 Box 252 Custer, SD 57730	do	Do.
Cement: South Dakota Cement Commis- sion.	Box 360 Rapid City, SD 57709	Four rotary kilns	Pennington.
Clays: American Colloid Co	5100 Suffield Ct.	Open pit mine and plant	Butte.
Dakota Block Co	Skokie, IL 60076 Box 2920	do	Pennington.
South Dakota Cement Commission.	Rapid City, SD 57709 Box 360 Rapid City, SD 57709	Open pit mine	Do.
Feldspar: Pacer Corp	Box 912 Custer, SD 57730	Open pit mines and dry- grinding plant.	Custer.
Gold: Homestake Mining Co	Box 875 Lead, SD 57754	Underground mine, cyani- dation mill, refinery.	Lawrence.
Gypsum: South Dakota Cement Commis- sion.	Box 360 Rapid City, SD 57709	Open pit mine	Pennington.
Lime: Pete Lien & Sons Inc	Box 440 Rapid City, SD 57709	1 rotary kiln, 1 vertical kiln, continuous-hydrator plant.	Do.
Mica: Concepts West Inc	Box 706	Mine and dry-grinding plant.	Custer.
Pacer Corp	Rapid City, SD 57709 Box 912 Custer, SD 57730	do	Do.
Sand and gravel (construction): W. E. Bartholomew & Son	Route 3 Huron, SD 57850	Pits and plants	Various.
Construction Co. Birdsall Sand & Gravel Co. Inc	Box 767	do	Fall River, Pen- nington, Sully.
Concrete Materials Inc	Rapid City, SD 57709 100 South Dakota Ave. Summit, SD 57266	do	Minnehaha and Roberts.
F. J. McLaughlin Co	Box 13 Watertown, SD 57201	Pit and plant	Codington.
Bernard Mahrer Construction Co.	Rutland, ND 58067	do	Marshall.
W. & D. Morris Construction Co. Inc.	Box 337 Sturgis, SD 57785	Pits and plants	Meade.
Obenauer Construction Co	Box 274 Eureka, SD 57437	Pit and plant	McPherson.
Reynolds Construction Co`	Box 689 Sioux Falls, SD 57101	do	Minnehaha.
Silver: Homestake Mining Čo	Box 875 Lead, SD 57754	See Gold	Lawrence.
Stone (crushed, 1981): Limestone:	•		
Centennial Quarry Co	Box 311 Spearfish, SD 57783	Quarry and plant	Do.
Pete Lien & Sons Inc	Box 440 Rapid City, SD 57709	Quarries and plants	Custer and Pennington.
Northwestern Engi- neering Co. (Hills Mate- rials Co.).	Box 2320 Rapid City, SD 57709	do	Fall River, Meade Pennington.
South Dakota Cement Commission. Sandstone:	Box 360 Rapid City, SD 57709	Quarry and plant	Pennington.
Concrete Materials Co	Box 809 Sioux Falls, SD 57101	do	Minnehaha.
L. G. Everist Inc	313 South Phillips Sioux Falls, SD 57101	do	Do.
Spencer Quarries Inc	Box 25 Spencer, SD 57374	do	Hanson.
Stone (dimension, 1981): Granite:	ppencer, on order		
Cold Spring Granite Co Dakota Granite Co	Cold Spring, MN 56320 _ Box 1351	Quarries Quarry	Grant. Do.
. Delano Granite Works Inc	Milbank, SD 57252 Delano, MN 55328	do	Do.

¹State Liaison Officer, Bureau of Mines, Minneapolis, Minn.