STATISTICAL SUMMARY

By Stephen D. Smith

This annual report summarizes data on crude nonfuel mineral production for the United States, its island possessions, and the Commonwealth of Puerto Rico. Also included in this report are tables that show the principal nonfuel mineral commodities exported from and imported into the United States. In addition, there is a table that compares world and U.S. mineral production for selected nonfuel mineral commodities. The detailed data from which these tables were derived are contained in the individual commodity and State Annual Reports published by the U.S. Bureau of Mines.

Although crude mineral production may be measured at any of several stages of extraction and processing, the stage of measurement used in this annual report is what is termed "mine output." This term refers to minerals or ores in the form in which they are first extracted from the ground, but customarily may include the output from auxiliary processing at or near the mines.

Because of inadequacies in the statistics available some series deviate from the foregoing definition. For the commodities of copper, gold, lead, silver, tin, and zinc, the quantities shown are recorded on a mine basis (as the recoverable content of ore sold or treated). However the values assigned to the quantities are based on the average selling price of refined metal, not the mine value. Mercury is measured as recovered metal and valued at the average New York price for the metal. Values shown are in current dollars, with no adjustments made to compensate for changes in the purchasing power of the dollar.

The total value of all nonfuel mineral production in the United States increased about 10% to \$35.2 billion in 1994, with metals increasing almost 12% to \$12.1 billion and industrial minerals rising approximately 9% to \$23.0 billion over that of 1993. Eight of the mineral commodities produced in the United States in 1994 had an individual total production value greater than \$1 billion.

These commodities in decending order, stone (crushed and broken); cement (portland); copper; gold; sand and gravel (construction); clays; iron ore; and lime; comprised over 78% of the U.S. total production. (*See table 1*.)

Eleven States in 1994 produced mineral commodities having an individual total production value of greater than \$1 billion. These States in decending order, Arizona; Nevada; California; Georgia; Texas; Utah; Michigan; Florida; Minnesota; Missouri; and Pennsylvania; comprised over 56% of the U.S. total production. (*See table 4*.)

U.S. exports of mineral commodities in 1994 decreased slightly overall, with metals decreasing almost 6% to \$21.4 billion, and industrial minerals increases of over 17% to \$5.1 billion. Imports into the United States increased more than 21%, with metals increasing over 26% to \$34.2 billion, and industrial minerals increased 7% to \$11.1 billion over that of 1993. (See tables 8 and 9.)

 ${\bf TABLE~1} \\ {\bf NONFUEL~MINERAL~PRODUCTION~1/~IN~THE~UNITED~STATES~2/} \\$

		1992		1993	1994		
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	
METALS		(thousands)		(thousands)		(tirousunus)	
Beryllium concentrates metric	tons 4,83	0 \$5	4,940	\$5	4,330	\$5	
Copper 3/	do. 1,760,00	0 4,180,000	1,800,000	3,640,000	1,810,000	4,430,000	
Gold 3/ kilog			331,000	3,840,000	326,000	4/ 4,040,000 4	
Iron ore thousand metric			56,300	1,640,000	57,600	1,580,000	
Iron oxide pigments (crude) metric			35,800	5,020	46,400	6,010	
Lead 3/	do. 397,00		355,000	249,000	363,000	298,000	
Magnesium metal	do. 137,00		132,000	377,000	128,000	389,000	
Mercury	do. 6		W	W	W	W	
Molybdenum 5/	do. 49,60		39,200	165,000	46,000	284,000	
Nickel ore 6/	do. 6,67		2,460	W			
Palladium kilog			6,500	25,300	6,440	29,400	
Platinum	do. 1,84		1,800	21,400	1,960	25,300	
Silver 3/ metric		,	1,650	227,000	1,480	252,000	
Zinc 3/	do. 523,000		488,000	497,000	570,000	619,000	
Combined value of antimony, bauxite, manganiferous	<u>uo.</u> 323,000	0 074,000	400,000	477,000	370,000	017,000	
ore (5% to 35%), rare-earth metal concentrates, tin							
(1992-93), titanium concentrates (ilmenite and rutile),							
tungsten, vanadium, zircon concentrates, and values							
-	v	X 151,000	vv	132,000 r/	, vv	147.000	
indicated by symbol W Total metals	X		XX XX	10,800,000 r/		12,100,000	
INDUSTRIAL MINERALS (EXCLUDING FUELS)	<u></u>	A 11,300,000	ΛΛ	10,800,000 1/	ΛΛ	12,100,000	
,	15.60	0 6140	12 400	5.060	10 100	£ 120	
Asbestos metric			13,400	5,960	10,100 583	5,120	
Barite thousand metric		,	315	19,300		21,700	
Boron minerals (B2O3) metric			1,050,000	373,000	1,110,000	443,000	
Bromine e/	<u>do.</u> 171,00	0 170,000	177,000	123,000	W	W	
Cement:			2050	220.000	2 - 1 0	205000	
Masonry thousand metric			2,960	229,000	3,610	286,000	
Portland	do. 66,10		71,600	3,920,000	74,300	4,460,000	
Clays	<u>do.</u> 40,70	, ,	40,700			1,600,000	
Diatomite metric			599,000	150,000	613,000	153,000	
Feldspar	do. 726,00	,	770,000	31,400	765,000	31,200	
Garnet (abrasive) thousand metric			W	W	42	15,100	
Gemstones	NA		NA	57,700	NA	50,500	
Gypsum (crude) thousand metric	tons 14,80	0 101,000	15,800	107,000	17,200	115,000	
Helium:							
Crude million cubic m	eters W	W	29	25,800	39	38,500	
Grade-A	<u>do.</u> 9-	4 187,000	96	189,000	100	199,000	
Iodine metric	tons 2,00	0 20,900	1,940	15,400	1,630	12,800	
Lime thousand metric	tons 16,20	950,000	16,800	r/ 965,000 r/	17,400	1,020,000	
Mica (scrap)	do. 8	5 4,640	88	4,450	110	7,280	
Peat	do. 65	2 16,700	612	16,800	552	15,300	
Perlite metric	tons 541,00	0 16,400	569,000	17,400	644,000	19,400	
Phosphate rock thousand metric	tons 47,00	0 1,060,000	35,500	759,000	41,100	839,000	
Potash (K2O equivalent)	do. 1,77	0 334,000	1,640	286,000	2,970	285,000	
Pumice metric	tons 481,00	0 14,900	469,000	12,000	490,000	11,800	
Salt thousand metric	tons 34,80	0 803,000	38,700	893,000	39,500	956,000	
Sand and gravel:		,	,	•			
Construction	do. 834,00	0 3,340,000	869,000	3,530,000	891,000	3,740,000	
Industrial	do. 25,20		26,200	454,000	27,300	488,000	
Silica stone 7/ metric			528	330	514	3,990	
Sodium compounds:		. 237	220	220	211	2,223	
Soda ash thousand metric	tons 9,38	0 836,000	8,960	734,000	9,320	724,000	
Sodium sulfate (natural)	do. 33		w	W	298	11,400	
Stone: 8/	<u>ao.</u> 33	, 20,300	vv	vv	290	11,400	
	do 1.050.00	0 5 500 000	1 120 000	r/ 6.020.000	1 220 000	6 620 000	
Crushed Dimension metric	do. 1,050,000		1,130,000 1,230,000			6,620,000	
Dimension metric				216,000	W 2.010	W	
Sulfur (Frasch) thousand metric			1,900	101,000	3,010	162,000	
Tripoli metric	tons 84,90	0 3,260	94,000	4,090	82,300	10,900	
	1 100.00		105.000	4.4.000	100.000	4.4.000	
Vermiculite Zeolites	do. 190,000 do. W		187,000 41,000	14,900 NA	177,000 58,000	14,200 NA	

TABLE 1 -- Continued NONFUEL MINERAL PRODUCTION 1/ IN THE UNITED STATES 2/

	1	992	1	993	1994		
Mineral	Quantity	Value	Quantity	Value	Quantity	Value	
		(thousands)		(thousands)		(thousands)	
INDUSTRIAL MINERALS (EXCLUDING FUELS) Continued							
Combined value of brucite, calcium chloride [natural 9/	-						
(1992)], emery, fluorspar, greensand marl, kyanite,							
lithium minerals, magnesite, magnesium compounds,							
olivine, pyrites 10/ (1992-93) sand and gravel							
(construction), staurolite, talc and pyrophyllite,							
wollastonite, and values indicated by symbol W	XX	525,000	XX	422,000 r/	XX	692,000	
Total industrial minerals	XX	20,600,000	XX	21,200,000 r/	XX	23,000,000	
Grand total	XX	32,100,000	XX	32,000,000 r/	XX	35,200,000	

- e/ Estimated. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" data. XX Not applicable.
- 1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
- 2/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.
- 3/ Recoverable content of ores, etc.
- 4/ Placer canvassing discontinued beginning 1994. May include some placer data from other sources.
- 5/ Content of ore and concentrate.
- 6/ The Riddle nickel smelter uses lateritic ore mined on Nickel Mountain, lateritic ore imported from New Caledonia, and small tonnages of recycled Ni-bearing catalysts. In 1989, the Glenbrook Nickel Co. purchased the idle mining and smelting complex and restarted the operation. Production of ferronickel on a contained Ni basis has been as follows: 1992--8,962 metric tons (mt) valued at \$62.7 million; 1993--4,878 mt valued at \$28.0 million; and in 1994 the Nickel Mountain mine was idle.
- 7/ Formerly identified as "abrasives". Includes grindstones, pulpstones, and sharpening stones; excludes mill liners and grinding pebbles.
- 8/ Excludes abrasive stone and bituminous limestone and sandstone; all included elsewhere in table.
- 9/ Canvassing discontinued beginning 1993.
- 10/ Canvassing discontinued beginning 1994.

TABLE 2 TOTAL U.S. NONRENEWABLE ORGANIC MATERIALS PRODUCTION, BY QUANTITY AND VALUE 1/2/

(Million metric tons unless otherwise specified)

	199)2	199	93	1994		
Category	Quantity	Value (millions)	Quantity	Value (millions)	Quantity	Value (millions)	
Asphalt and road oil	25.30	\$2,800	27.20	\$2,690	(3/)	(3/)	
Lubricants, waxes, and miscellaneous products	12.40	1,530	12.70	1,370	(3/)	(3/)	
Petrochemical industries	66.60	7,540	66.00	6,820	(3/)	(3/)	
Petroleum coke and coal	12.70	1,110	12.90	986	(3/)	(3/)	
Total	117.00	13,000	119.00	11,900	(3/)	(3/)	

^{1/} Quantities valued at the fossil fuel prices given in the Department of Energy, Energy Information Administration, Annual Energy Review 1992.

Note: Nonrenewable organic materials represent all nonfuel uses in physical structure applications. The petrochemical industries category includes feedstocks for the production of plastics, synthetic rubber, synthetic fibers, pesticides, coatings, solvents, fertilizers, and other petrochemicals.

^{2/} Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

^{3/} Coverage discontinued beginning 1994.

TABLE 3 NONFUEL MINERALS PRODUCED IN THE UNITED STATES, BY COMMODITY AND STATES IN 1994

(Based on quantity unless otherwise noted)

Mineral	Principal States	Other States
Antimony 1/	ID	
Asbestos	CA and VT	
Barite	GA, NV, MO, MT,TN, IL	
Bauxite	AL and GA	
Beryllium concentrate	UT	
Boron minerals	CA	
Bromine e/	AR	
Brucite	NV	
Cement:		
Masonry	FL, IN, AL, MD, SC, PA	All other states except AK, CT, DE, LA, MA, MN, MS, NV, NH, NJ, NC, ND, OR, R VT, WI, WY.
Portland	CA, TX, MI, PA, MO, AL	All other states except AK, CT, DE, LA, MA, MN, NH, NJ, NC, ND, RI, VT, WI.
Clays	GA, WY, FL, CA, MS, TN	All other states except AK, DE, HI, ID, RI, VT, WI.
Copper 1/	AZ, UT, NM, MT, MI, WI	ID, IL, MO, NV, OR, and TN.
Diatomite	CA, NV, WA, OR	12, 12, 110, 111, 514, 4114
Emery	OR	
Feldspar	NC, CA, VA, GA, OK, ID	SD
Fluorspar	IL	שט
Garnet (abrasive)	ID and NY	
		All other states
Gemstones (natural) 2/	TN, AR, AL, KY, AZ, MT	All other states.
Gold 1/3/	NV, CA, UT, SD, MT, WA	AK, AZ, CO, ID, NM, OR, SC, WI.
Greensand	NJ	
Gypsum (crude)	OK, MI, IA, TX, NV,IN	AR, AZ, CA, CO, IN, KS, LA, NM, NY, OH, UT, VA, WY.
Helium (crude and Grade-A)	KS, WY, TX, UT, CO	
odine	OK	
ron ore (usable) 4/	MN, MI, MO, UT, TX, SD	CA, MI, NM
ron oxide pigments (crude)	MO, GA, MI, VA, AZ	
Kyanite	VA	
Lead 1/	MO, AK, ID, MT, CO, NY	IL and TN.
Lime	OH, MO, PA, AL, KY, TX	All other states except AK, CT, DE, FL, GA, HI, KS, ME, MD, MS, NH, NJ, NM, NY, NC, RI, SC, VT.
Lithium minerals	NC and NV	
Magnesite	NV	
Magnesium compounds	MI, DE, FL, CA, UT, TX	
Magnesium metal	TX, WA, UT	
Manganiferous ore	SC SC	
Mercury	NV, UT, CA	
•		-
Mica (scrap)	NC, GA, NM, SC, SD	
Molybdenum	AZ, CO, UT, MT, ID, NM	
Nickel ore	OR WALLING	
Olivine	WA and NC	
Palladium metal	MT	
Peat	MI, FL, MN, IL, ME, NC	CO, IA, ME, MA, MT, NJ, NY, ND, OH, PA, SC, WA, WV, WI.
Perlite	NM, AZ, CA, NV	
Phosphate rock	FL, NC, ID, UT	
Platinum metal	MT	
Potash	NM, UT, CA, MI	
Pumice	CA, OR, AZ, NM, KS, ID	
Pyrites (ore and concentrate)	(5/)	
Rare-earth metal concentrates	CA and FL	
Salt	NY, OH, LA, KS, MI, TX	AL, AZ, CA, NV, NM, OK, UT, WV.
Sand and gravel:		, —, ===,===, ===, v=, ==
Construction	CA, TX, OH, AZ, WA, MI	All other states.
Industrial	IL, CA, TX, WI, MI, NJ	All other states except AK, DE, HI, KY, ME, NH, NM, OR, SD, UT, VT, WY.
Silica stone 6/		All other states except AK, DE, III, KT, ME, NH, NM, OK, SD, UT, VT, WT.
	AR and WI	CA CO II MI MO NM NV OD CC CD TN WA WI
Silver 1/	NV, AZ, ID, UT, AK, MT	CA, CO, IL, MI, MO, NM, NY, OR, SC, SD, TN, WA, WI.
Sodium compounds:	–	
Soda ash	WY and CA	
Sodium sulfate (natural)	TX and CA	
Staurolite	FL	

TABLE 3 -- Continued NONFUEL MINERALS PRODUCED IN THE UNITED STATES, BY COMMODITY AND STATES IN 1994

(Based on quantity unless otherwise noted)

Mineral	Principal States	Other States
Stone:		
Crushed	PA, IL, NC, FL, GA, MO	All other states except DE.
Dimension	IN, GA, WI, VT, TX, NC	All other states except AK, DE, FL, HI, KY, LA, MS, NE, NV, NJ, ND, OR, RI, WY.
Sulfur (Frasch)	LA and TX	
Talc and pyrophyllite	MT, NY, TX, VT, MC, CA	VA and OR.
Tin	(7/)	
Titanium concentrates	FL and CA	
Tripoli	IL, OK, AR, PA	
Tungsten 1/	— CA	
Vanadium 1/	ID	
Vermiculite (crude)	SC and VA	
Wollastonite	NY	
Zeolites	TX, OR, NV, NJ, AZ, CA	ID.
Zinc 1/	AK, TN, NY, MO, MT, CO	IL, ID, OR.
Zircon concentrates	FL	

- e/ Estimated.
- 1/ Content of ores, etc.
- 2/ Principal producing States based on value.
- 3/ Placer canvassing discontinued beginning 1994. May include some placer data from other sources.
- 4/ Includes byproduct material.
- 5/ Canvassing discontinued.
- 6/ Formerly identified as "Abrasives." Includes grindstones, pulpstones, and sharpening stones; excludes mill liners and grinding pebbles.
- 7/ No production.

TABLE 4 VALUE OF NONFUEL MINERAL PRODUCTION IN THE UNITED STATES AND PRINCIPAL NONFUEL MINERALS PRODUCED IN 1994 1/

State	Value	Rank	Percent of	Principal minerals, in order of value
	(thousands)		U.S. total	
Alabama	\$626,000	18		Cement (portland), stone (crushed and broken), lime, sand and gravel (construction), clays, cement (masonry).
Alaska	519,000	23		Zinc, gold, sand and gravel (construction), lead, stone (crushed and broken), silver.
Arizona	3,280,000	1		Copper, sand and gravel (construction), cement (portland), molybdenum, lime, silver.
Arkansas	405,000	30	1.15	Bromine, stone (crushed and broken), sand and gravel (construction), cement (portland), sand and gravel (industrial), lime.
California	2,580,000	3	7.35	Cement (portland), sand and gravel (construction), boron, gold, stone (crushed and broken), diatomite.
Colorado	410,000	29		Sand and gravel (construction), cement (portland), molybdenum, gold, stone (crushed and broken), zinc.
Connecticut	81,800	44	0.23	Stone (crushed and broken), sand and gravel (construction), stone (dimension), sand and gravel (industrial), clays, gemstones.
Delaware 2/	8,680	50	0.03	Sand and gravel (construction), magnesium compounds, gemstones.
Florida	1,370,000	8	3.90	Phosphate rock, stone (crushed and broken), cement (portland), sand and gravel (construction), clays, titanium concentrates.
Georgia	1,550,000	4	4.41	Clays, stone (crushed and broken), cement (portland), sand and gravel (construction), stone (dimension), cement (masonry).
Hawaii 2/	116,000	43	0.33	Stone (crushed and broken), cement (portland), sand and gravel (construction), cement (masonry), gemstones.
Idaho	346,000	32		Phosphate rock, sand and gravel (construction), gold, molybdenum, silver, stone (crushed and broken).
Illinois	823,000	16		Stone (crushed and broken), cement (portland), sand and gravel (construction), sand and gravel (industrial), lime, clays.
Indiana	555,000	21	1.58	Stone (crushed and broken), cement (portland), sand and gravel (construction), lime, cement (masonry), stone (dimension).
Iowa	451,000	26	1.28	Stone (crushed and broken), cement (portland), sand and gravel (construction), gypsum, lime, cement (masonry).
Kansas	497,000	25		Salt, helium (Grade-A), stone (crushed abd broken), cement (portland), helium (crude), sand and gravel (construction).
Kentucky	428,000	28	1.22	Stone (crushed and broken), lime, cement (portland), sand and gravel (construction), clays, cement (masonry).
Louisiana	354,000	31	1.01	Salt, sulfur (Frasch), sand and gravel (construction), stone (crushed and broken), sand and gravel (industrial), lime.
Maine	61,000	45	0.17	Sand and gravel (construction), cement (portland), stone (crushed and broken), cement (masonry), peat, stone (dimension).
Maryland	340,000	33	0.97	Stone (crushed and broken), cement (portland), sand and gravel (construction), cement (masonry), stone (dimension), clays.
Massachusetts	178,000	40	0.51	Stone (crushed and broken), sand and gravel (construction), lime, stone (dimension), clays, peats.
Michigan	1,430,000	7	4.06	Iron ore (usable), cement (portland), sand and gravel (construction), magnesium compounds, stone (crushed and broken), copper.
Minnesota	1,340,000	9	3.82	Iron ore (usable), sand and gravel (construction), stone (crushed and broken), sand and gravel (industrial), stone (dimension), lime.
Mississippi	135,000	42	0.38	Sand and gravel (construction), clays, cement (portland), stone (crushed and broken), sand and gravel (industrial), gemstones.
Missouri	1,090,000	10	3.09	Stone (crushed and broken), cement (portland), lead, lime, zinc, sand and gravel (construction).
Montana	543,000	22	1.54	Gold, copper, cement (portland), molybdenum, palladium metal, sand and gravel (construction).
Nebraska	146,000	41	0.42	Cement (portland), sand and gravel (construction), stone (crushed and broken), lime, clays, cement (masonry).
Nevada	3,070,000	2	8.73	Gold, silver, sand and gravel (construction), diatomite, lime, cement (portland).
New Hampshire 2/	46,400	47	0.13	Sand and gravel (construction), stone (dimension), stone (crushed and broken), gemstones, clays.
New Jersey	289,000	36	0.82	Stone (crushed and broken), sand and gravel (construction), sand and gravel (industrial), greensand marl, clays, peat.
New Mexico	929,000	12	2.64	Copper, potash, sand and gravel (construction), cement (portland), stone (crushed and broken), perlite.
New York	892,000	13	2.54	Stone (crushed and broken), salt, cement (portland), sand and gravel (construction), zinc, wollastonite.
North Carolina	708,000	17	2.01	Stone (crushed and broken), phosphate rock, lithium minerals, sand and gravel (construction), sand and gravel (industrial), feldspar.
North Dakota	25,300	49	0.07	Sand and gravel (construction), lime, clays, sand and gravel (industrial), gemstones, peat.
Ohio	880,000	15	2.50	Stone (crushed and broken), sand and gravel (construction), salt, lime, cement (portland), sand and gravel (industrial).
Oklahoma	340,000	34	0.97	Stone (crushed and broken), cement (portland), sand and gravel (construction), sand and gravel (industrial), gypsum, iodine.
Oregon	243,000	38	0.69	Stone (crushed and broken), sand and gravel (construction), cement (portland), lime, diatomite, pumice.
Pennsylvania	1,010,000	11		Stone (crushed and broken), cement (portland), lime, sand and gravel (construction), cement (masonry), sand and gravel (industrial).
Rhode Island 2/	26,300	48	0.08	Sand and gravel (construction), stone (crushed and broken), sand and gravel (industrial), gemstones.
South Carolina	433,000	27		Cement (portland), stone (crushed and broken), gold, clays, sand and gravel (construction), cement (masonry).
South Dakota	324,000	35		Gold, cement (portland), stone (crushed and broken), sand and gravel (construction), stone (dimension), lime.
Tennessee	602,000	19		Stone (crushed and broken), zinc, cement (portland), sand and gravel (construction), clays, gemstones.
Texas	1,530,000	5		Cement (portland), stone (crushed and gravel), sand and gravel (construction), magnesium metal, lime, salt.
Utah	1,520,000	6		Copper, gold, magnesium metal, sand and gravel (construction), cement (portland), salt.

TABLE 4 -- Continued $\begin{tabular}{ll} VALUE OF NONFUEL MINERAL PRODUCTION IN THE UNITED STATES AND PRINCIPAL NONFUEL MINERALS \\ PRODUCED IN 1994 1/ \end{tabular}$

	(thousands)		U.S. total	
			U.S. 10tal	
Vermont 2/	48,600	46	0.14	Stone (crushed and broken), sand and gravel (construction), stone (dimension), talc and pyrophyllite, asbestos,
				gemstones.
Virginia	502,000	24	1.43	Stone (crushed and broken), cement (portland), lime, sand and gravel (construction), clays, kyanite.
Washington	571,000	20	1.63	Sand and gravel (construction), magnesium metal, gold, stone (crushed and gravel), cement (portland), lime.
West Virginia	181,000	39	0.52	Stone (crushed and broken), cement (portland), sand and gravel (industrial), salt, lime, cement (masonry).
Wisconsin 2/	283,000	37	0.80	Stone (crushed and broken), copper, sand and gravel (construction), sand and gravel (industrial), lime, gold.
Wyoming	880,000	14	2.50	Soda ash, clays, helium (Grade-A), cement (portland), stone (crushed and broken), sand and gravel (construction).
Undistributed	155,000		0.44	
Total	35,200,000	XX	100.00	

XX Not applicable.

^{1/} Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

^{2/} Partial total, excludes values that must be concealed to avoid disclosing company proprietary data. Concealed values included with "Undistributed" figure.

TABLE 5 VALUE OF NONFUEL MINERAL PRODUCTION PER CAPITA AND PER SQUARE MILE IN 1994, BY STATE 1/

State	Area	Population	Total	Per capit	a	Per square i	mile
	(square	(thousands)	value	Dollars	Rank	Dollars	Rank
	miles)		(thousands)				
Alabama	51,700	4,220	\$626,000	148	17	12,100	25
Alaska	_ 591,000	606	519,000	856	3	877	49
Arizona	114,000	4,080	3,280,000	804	4	28,800	3
Arkansas	_ 53,200	2,450	405,000	165	14	7,620	31
California	_ 159,000	31,400	2,580,000	82	33	16,300	16
Colorado	_ 104,000	3,660	410,000	112	20	3,940	43
Connecticut	5,020	3,280	81,800	25	49	16,300	15
Delaware	2,040	706	8,680 2/	12	50	4,250	40
Florida	_ 58,700	14,000	1,370,000	98	26	23,400	7
Georgia	_ 58,900	7,060	1,550,000	220	11	26,300	5
Hawaii	6,470	1,180	116,000 2/	98	27	17,900	14
Idaho	_ 83,600	1,130	346,000	305	9	4,140	42
Illinois	56,300	11,800	823,000	70	38	14,600	20
Indiana	36,200	5,750	555,000	97	28	15,300	19
Iowa	56,300	2,830	451,000	160	15	8,020	29
Kansas	82,300	2,550	497,000	194	13	6,040	34
Kentucky	40,400	3,830	428,000	112	21	10,600	26
Louisiana	47,800	4,320	354,000	82	34	7,410	33
Maine	33,300	1,240	61,000	49	42	1,830	48
Maryland	10,500	5,010	340,000	68	39	32,500	2
Massachusetts	8,280	6,040	178,000	29	47	21,400	10
Michigan	58,500	9,500	1,430,000	150	16	24,400	6
Minnesota	84,400	4,570	1,340,000	294	10	15,900	17
Mississippi	47,700	2,670	135,000	51	41	2,830	45
Missouri	69,700	5,280	1,090,000	206	12	15,600	18
Montana	147,000	856	543,000	634	6	3,690	44
Nebraska	77,400	1,620	146,000	90	29	1,890	47
Nevada	111,000	1,460	3,070,000	2,110	1	27,800	4
New Hampshire	9,280	1,140	46,400 2/	41	44	5,000	38
New Jersey	7,790	7,900	289,000	37	46	37,100	1
New Mexico	122,000	1,650	929,000	562	7	7,640	30
New York	49,100	18,200	892,000	49	43	18,200	12
North Carolina	52,700	7,070	708,000	100	24	13,400	23
North Dakota	70,700	638	25,300	40	45	358	50
Ohio	41,300	11,100	880,000	79	35	21,300	11
Oklahoma	70,000	3,260	340,000	104	23	4,860	39
Oregon	97,100	3,090	243,000	79	36	2,500	46
Pennsylvania	45,300	12,100	1,010,000	83	31	22,200	8
Rhode Island	1,210	997	26,300 2/	26	48	21,700	9
South Carolina	31,100	3,660	433,000	118	18	13,900	22
South Dakota	77,100	721	324,000	449	8	4,200	41
Tennessee	42,100	5,180	602,000	116	19	14,300	21
Texas	267,000	18,400	1,530,000	83	32	5,750	35
Utah	84,900	1,910	1,520,000	799	5	17,900	13
Vermont	9,610	580	48,600 2/	84	30	5,060	36
Virginia	40,800	6,550	502,000	77	37	12,300	24
Washington	68,100	5,340	571,000	107	22	8,380	28
West Virginia	24,200	1,820	181,000	99	25	7,470	32
Wisconsin	56,200	5,080	283,000 2/	56	40	5,040	37
Wyoming	97,800	476	880,000	1,850	2	9,000	27
Undistributed	XX	XX	155,000	XX	XX	XX	XX
Total or average	3,620,000 3		<u> </u>	135	XX	9,710	XX
VV N-4 1: 1-1-	-,-20,000 2		,,000	-55		-,	

XX Not applicable.

Sources: U.S. Bureau of Mines and Bureau of the Census.

^{1/} Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

^{2/} Partial total, excludes values that must be concealed to avoid disclosing company proprietary data. Concealed values included with "Undistributed" figure.

^{3/} Excludes Washington, DC (which has no mineral production), with an area of 69 square miles and a population of 570,000.

TABLE 6 NONFUEL RAW MINERAL PRODUCTION 1/ 2/ IN THE UNITED STATES, BY STATE

			1992			993		1994			
Mineral		Quantity		Value	Quantity	Value	Quantity	Value			
				(thousands)		(thousands)		(thousands)			
Comments				ALABAMA							
Cement:	4	102		\$11.100	277	¢21 000	212	¢20,000			
	and metric tons	193		. ,	277	\$21,900	312	\$28,900 248,000			
Portland	do.	3,720		181,000	3,750	191,000	3,980				
Clays 3/	do.	2,380		20,900	2,490	23,200	2,280	25,400			
Lime	do.	1,450		82,600	1,630	89,500	1,660	88,300			
Sand and gravel:		11.200		12.000	10.200	/ 20.100	12.500	47 600			
Construction	do.	11,200		42,000	10,300 e		,	47,600			
Industrial	do.	605		6,770	559	6,800	610	7,160			
Stone (crushed)	do.	25,900	e/ 4/	176,000 e/ 4/	28,900	176,000	32,500	164,000			
Combined value of bauxite, clays [bentoning	*										
kaolin (1992)], gemstones, salt, and stone											
(crushed dolomite and granite (1992), dir											
(1992-93), dimension (limestone,marble,	and										
sandstone)]		XX		22,900	XX	14,900	XX	16,500			
Total		XX		543,000	XX	562,000	XX	626,000			
				ALASKA							
Gemstones		NA		10	NA	10	NA	10			
Gold 5/	kilograms	5,000		55,500	2,780	32,200	5,740	5/ 71,100			
Sand and gravel (construction)											
thousa	and metric tons	13,600		43,300	13,100 e/	42,600 e/	15,700	56,200			
Stone (crushed)	do.	2,720	e/ 4/	13,400 e/ 4/	2,430	11,300 5	/ 3,870	24,100			
Combined value of lead, silver, stone [crus	hed										
sandstone (1992-93)], tin (1993-94), and	zinc	XX		414,000	XX	291,000	XX	367,000			
Total		XX		526,000	XX	378,000	XX	519,000			
				ARIZONA							
Clays 3/ thousa	and metric tons	102		463	97	451	98	452			
Copper 5/	metric tons	1,150,000		2,730,000	1,160,000	2,340,000	1,120,000	2,750,000			
Gemstones		NA		5,420	NA	5,630	NA	3,550			
Gold 5/	kilograms	6,660		73,800	2,710	31,500	1,980	5/ 24,500			
Iron oxide pigments (crude)	metric tons	77		62	77	62	77	62			
Sand and gravel (construction)											
thousa	and metric tons	30,700		124,000	35,000 e	/ 138,000 e	/ 34,800	166,000			
Silver 5/	metric tons	165		20,900	200	27,700	192	32,600			
Stone (crushed) thousa	and metric tons	4,990	e/	26,300 e/	6,430	36,800	4,970	25,000			
Combined value of cement, clays (bentonit											
gypsum (crude), lead (1992), lime, molyb	denum,										
perlite, pumice, pyrites 7/ (1992-93), salt.	, sand										
and gravel (industrial), stone [dimension	•										
(1992-93), dimension sandstone (1994)],	and										
tin (1992)		XX		184,000	XX	196,000	XX	274,000			
Total		XX		3,160,000	XX	2,780,000	XX	3,280,000			
				ARKANSAS		, ,		.,,			
Bromine e/	metric tons	171,000	-	170,000	177,000	123,000	W	W			
	and metric tons	837		2,970	1,030	2,360	883	2,440			
Gemstones		NA		1,490	NA	5,530	NA	3,950			
Sand and gravel:	-			-,	- 1	2,220	1,11	2,200			
	and metric tons	9,900		39,600	10,100 e	/ 40,900 e	/ 10,600	42,500			
Industrial	do.	806		10,500	642	7,600	684	8,230			
Silica stone 8/	metric tons	W		W	W	7,000 W	469	3,910			
Stone (crushed) 4/	do.	22,900	e/	119,000 e/	21,700	103,000	20,800	122,000			
Combined value of cement, clays (fire, kao		22,700	J	117,000 0	21,700	103,000	20,000	122,000			
gypsum (crude), lime, stone [crushed dolo	, .										
and quartzite (1993), crushed dolomite ar											
traprock (1992), crushed limestone and tr (1994), dimension (1992-93), dimension											
C19941 dimension (1997-93) dimension	iiinestone,										
marble, and sandstone (1994)], talc and											
marble, and sandstone (1994)], talc and pyrophyllite (1993), tripoli, and values in	dicated by			-0.4							
marble, and sandstone (1994)], talc and	dicated by	XX XX		60,400	XX XX	65,100 347,000	XX XX	223,000 405,000			

$\label{thm:table 6--} TABLE\,6-- Continued \\ NONFUEL\,RAW\,MINERAL\,PRODUCTION\,1/\,2/\,IN\,THE\,UNITED\,STATES,\,BY\,STATE$

		1992			1993		1994		
Mineral	Quantity		Value	Quantity		alue	Quantity		Value
			(thousands)		(thou	usands)		((thousands)
	44.000	C.	ALIFORNIA	10.000			0.000		* 1.20 0
Asbestos metric tons	11,000		\$4,450	10,000		\$4,430	8,990		\$4,200
Boron minerals (B2O3) thousand metric tons	554		339,000	574	3	373,000	550	,	443,000
Cement:	***		***	***		***	00	`	6 920
Masonry do.	W		W	W		W	99		6,830
Portland do.	7,290		428,000	8,510		168,000	9,640		539,000
Clays 3/ do.	1,910		26,200	1,930	r/	26,300 r/	1,570		20,600
Gemstones	NA		9,920	NA		673	NA		1,710
Gold 5/ kilograms	33,300		370,000	35,800		115,000	30,100		373,000
Lime thousand metric tons	254		18,100	193		14,800	203		16,900
Mercury metric tons	(9/)		(9/)	W		W	W		W
Rare-earth metal concentrates	20.500			4.7.000			20.500		
do.	20,700		W	17,800		W	20,700	,	W
Sand and gravel:									
Construction thousand metric tons	102,000		522,000	96,300		176,000 e/	96,300		523,000
Industrial do.	1,920		42,500	1,800		41,700	1,740		39,400
Silver 5/ metric tons	18		2,260	14		2,000	11		1,910
Stone:									
Crushed thousand metric tons	37,000		198,000 e/	38,200	2	250,000	41,100		258,000
Dimension metric tons	21,100	e/	4,150 e/	29,100		6,300	11,100)	4,030
Combined value of calcium chloride 10/ (1992),									
cement (masonry), clays [fuller's earth, kaolin									
(1994)], diatomite, feldspar, gypsum (crude), iron									
ore (usable), magnesium compounds,									
molybdenum (1992), perlite, potash, pumice, salt,									
soda ash, sodium sulfate (natural), stone									
[dimension limestone, sandstone, and slate									
(1994)], talc and pyrophyllite, titanium (ilmenite),									
tungsten, and values indicated by symbol W	XX		403,000	XX	3	362,000	XX		351,000
Total	XX		2,370,000	XX	2,4	140,000 r/	XX		2,580,000
		C	OLORADO						
Clays thousand metric tons	242	3/	1,800 3/	281		2,160	291		2,320
Gemstones	NA		225	NA		258	NA		267
Gold 5/ kilograms	3,760		41,700	W		W	4,420) 6/	54,700
Peat thousand metric tons	W		333	W		W	W		W
Sand and gravel (construction)									
do.	26,700		105,000	29,000	e/ 1	18,000 e/	29,000)	109,000
Stone:	,,		,	,,	-	,	,,		,
Crushed do.	10,900	e/	60,400 e/	10,300		62,000	8,600)	53,600
Dimension metric tons	5,850		252 e/	4,320		1,370	3,630		51
Combined value of cement, clays [fire (1992)],	5,050	G	232 0	7,320		1,570	3,030	T/	<i>J</i> 1 ·
copper (1992-93), gypsum (crude), helium									
(Grade-A), lead, lime, molybdenum, perlite									
(1992-93), sand and gravel (industrial), silver, stone									
stone [dimension marble (1994)], zinc, and values									
indicated by symbol W	XX		175,000	XX	2	216,000	XX	<u>-</u>	191,000
Total	XX		385,000	XX		399,000	XX		410,000
1 Utal	ΛΛ	CO	NNECTICUT	ΛΛ	3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-	410,000
Gemstones	NA	CO		NA		5	NA		5
Sand and gravel (construction)	NΑ		5	INA		5	INA		3
,	5 470		20 100	£ 100	0/	24 000 -/	F 400	`	20 000
thousand metric tons	5,470	-/ 4/	30,100	6,400		34,900 e/	5,420		28,000
Stone (crushed) do.	5,350	e/ 4/	54,500 e/ 4	4,600	4/	39,500 4/	5,710	1	51,000
Combined value of clays (common), sand and									
gravel (industrial), and stone [crushed dolomite									
and miscellaneous (1992-93), dimension (1992-93),			مد- جرد						
dimension grantie and quartzite (1994)]	XX		13,500	XX		16,200	XX		2,670
Total	XX		98,100	XX		90,700	XX		81,800
		D	ELAWARE						
Gemstones	NA		1	NA		1	NA		1
Sand and gravel (construction)									
thousand metric tons	2,260		8,570	2,500	e/	10,300 e/	2,580)	8,680
Total 11/	XX		8,580	XX		10,300	XX		8,680

$\label{thm:table 6--} TABLE\,6-- Continued \\ NONFUEL\,RAW\,MINERAL\,PRODUCTION\,1/\,2/\,IN\,THE\,UNITED\,STATES,\,BY\,STATE$

		1992				199		1994		
Mineral	Quantity		Value		Quantity		Value	Quantity	Value	
			(thousands)				(thousands)		(thousands)	
			FLORIDA							
Cement:										
Masonry thousand metric			\$22,400		351		\$27,300	400	\$34,600	
Portland	<u>do.</u> 2,900		162,000		4,190		211,000	3,370	228,000	
Clays 3/	<u>do.</u> 367		37,200		407		52,700	430	55,000	
Gemstones	NA		1		NA		W	NA	W	
Peat thousand metric	tons 191		3,160		219		3,780	206	3,230	
Sand and gravel:										
Construction	<u>do.</u> 21,100		66,100		22,800	e/	73,100 e/	16,600	60,700	
Industrial	<u>do.</u> 433		5,170		504		5,910	540	6,120	
Stone (crushed) 4/	<u>do.</u> 53,800) e/	267,000	e/	64,900		313,000	67,000	343,000	
Combined value of clays (common), magnesium										
compounds, phosphate rock, rare-earth metal										
metal concentrates, staurolite, stone [crushed										
dolomite and limestone (1993), crushed marl										
(1992)], titanium concentrates (ilmenite and rutile),										
zircon concentrates, and values indicated by										
symbol W	XX		877,000		XX		624,000	XX	639,000	
Total	XX		1,440,000		XX		1,310,000	XX	1,370,000	
			GEORGIA							
Clays 3/ thousand metric			971,000		9,660	r/	994,000 r/	9,960	1,060,000	
Gem stones	NA		645		NA		51	NA	51	
Sand and gravel:										
Construction thousand metric			15,600		4,600	e/	16,600 e/	5,520	19,800	
Industrial	<u>do.</u> 533	3	8,780		491		7,940	440	7,040	
Stone:										
Crushed	<u>do.</u> 39,900		244,000		49,400		292,000	54,600	331,000	
Dimension metric Combined value of barite, bauxite, cement, clays	tons 144,000	e/4/	13,100	e/ 4/	176,000	4/	18,700 4/	200,000	19,100	
· · · · · · · · · · · · · · · · · · ·										
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93).		-	02.000		V 2.		101.000	177	116,000	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)]	XX		93,000		XX		101,000	XX	116,000	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93).			1,350,000		XX XX		101,000 1,430,000 r/	XX XX	116,000 1,550,000	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total	XX									
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement:	XX		1,350,000 HAWAII		XX		1,430,000 r/	XX	1,550,000	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric	XX XX tons	1	1,350,000 HAWAII 1,420		XX 7		1,430,000 r/ 880	XX 6	1,550,000	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland	XX	1	1,350,000 HAWAII		XX		1,430,000 r/	XX	1,550,000	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric	XX XX XX XX XX XX XX X	1	1,350,000 HAWAII 1,420 53,900		7 451		1,430,000 r/ 880 48,300	6 404	1,550,000 395 28,300	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction)	XX XX XX XX XX XX XX X	7	1,350,000 HAWAII 1,420 53,900 W	e/ //	7 451 W		1,430,000 r/ 880 48,300 W	6 404 521	1,550,000 395 28,300 4,740	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed)	XX XX XX XX XX XX XX X) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500	e/ 4/	7 451 W 8,460		1,430,000 r/ 880 48,300 W 81,400	6 404 521 8,170	1,550,000 395 28,300 4,740 82,300	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals	XX XX XX XX XX XX XX X	7)) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/)		7 451 W 8,460 XX		1,430,000 r/ 880 48,300 W 81,400 8,140	6 404 521 8,170 XX	1,550,000 395 28,300 4,740 82,300 (12/)	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed)	XX XX XX XX XX XX XX X	7)) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000		7 451 W 8,460		1,430,000 r/ 880 48,300 W 81,400	6 404 521 8,170	1,550,000 395 28,300 4,740 82,300	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total	XX XX XX XX XX XX XX X) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO		7 451 W 8,460 XX XX		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000	521 8,170 XX XX	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones	XX XX XX XX XX XX XX X) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390		7 451 W 8,460 XX XX		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000	521 8,170 XX XX	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr	XX XX XX XX XX XX XX X) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800		7 451 W 8,460 XX XX NA W		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W	521 8,170 XX XX NA W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric	XX XX XX XX XX XX XX X) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W		7 451 W 8,460 XX XX NA W		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W	521 8,170 XX XX XX NA W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric	XX XX XX XX XX XX XX X	7) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000		7 451 W 8,460 XX XX NA W 4,360		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400	521 8,170 XX XX XX NA W W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric	XX XX XX XX XX XX XX X	7) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W		7 451 W 8,460 XX XX NA W		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W	521 8,170 XX XX XX NA W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric Sand and gravel:	XX XX XX XX XX XX XX X	7) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000 401		7 451 W 8,460 XX XX NA W 4,360 43,400		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400 327	6 404 521 8,170 XX XX XX NA W W W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric Sand and gravel: Construction thousand metric	XX XX XX XX XX XX XX X	7) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000 401		7 451 W 8,460 XX XX XX NA W 4,360 43,400		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400 327 44,900 e/	6 404 521 8,170 XX XX XX NA W W W W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W W W 46,300	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric Sand and gravel: Construction thousand metric Industrial	XX XX XX XX XX XX XX X	7) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000 401 40,700 9,210		7 451 W 8,460 XX XX XX NA W 4,360 43,400 U		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400 327 44,900 e/ W	XX 6 404 521 8,170 XX XX XX NA W W W W W W W W W W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W W W 46,300 W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric Sand and gravel: Construction thousand metric Industrial Silver 5/ metric	XX XX XX XX XX XX XX X	7) e/ 4/ (3))))))))))))))))))	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000 401 40,700 9,210 32,100	11/	7 451 W 8,460 XX XX NA W 4,360 43,400 W 190		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400 327 44,900 e/ W 26,200	XX 6 404 521 8,170 XX XX XX NA W W W W W W W W W W W W W W W W W W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W W W W W W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93). dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric Sand and gravel: Construction thousand metric Industrial Silver 5/ metric Stone (crushed) thousand metric Combined value of antimony, cement, clays [common (1992-93)], copper, feldspar, garnet (abrasive), lead, lime, perlite (1992), stone	XX XX XX XX XX XX XX X	7) e/ 4/ (3))))))))))))))))))	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000 401 40,700 9,210	11/	7 451 W 8,460 XX XX XX NA W 4,360 43,400 U		1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400 327 44,900 e/ W	XX 6 404 521 8,170 XX XX XX NA W W W W W W W W W W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W W W 46,300 W	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93), dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric Sand and gravel: Construction thousand metric Industrial Silver 5/ metric Stone (crushed) thousand metric Combined value of antimony, cement, clays [common (1992-93)], copper, feldspar, garnet (abrasive), lead, lime, perlite (1992), stone (dimension), vanadium ore, zinc, and values	XX XX XX XX XX XX XX X) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000 401 40,700 9,210 32,100 19,200	11/	7 451 W 8,460 XX XX NA W 4,360 43,400 13,600 W 190 4,600	e/	1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400 327 44,900 e/ W 26,200 20,800	NA W W W W W 4,160	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W W W W 46,300 W W 20,300	
(fire), feldspar, iron oxide pigments (crude), mica (scrap), and stone [crushed marl, marble, and miscellaneous (1992), dimension marble (1992-93). dimension marble and miscellaneous (1994)] Total Cement: Masonry thousand metric Portland Sand and gravel (construction) Stone (crushed) Combined value of other industrial minerals Total Gemstones Gold 5/ kilogr Molybdenum metric Phosphate rock thousand metric Pumice metric Sand and gravel: Construction thousand metric Industrial Silver 5/ metric Stone (crushed) thousand metric Combined value of antimony, cement, clays [common (1992-93)], copper, feldspar, garnet (abrasive), lead, lime, perlite (1992), stone	XX XX XX XX XX XX XX X) e/ 4/	1,350,000 HAWAII 1,420 53,900 W 93,500 (12/) 149,000 IDAHO 390 44,800 W 84,000 401 40,700 9,210 32,100	11/	7 451 W 8,460 XX XX NA W 4,360 43,400 W 190	e/	1,430,000 r/ 880 48,300 W 81,400 8,140 139,000 566 W 78,400 327 44,900 e/ W 26,200	XX 6 404 521 8,170 XX XX XX NA W W W W W W W W W W W W W W W W W W	1,550,000 395 28,300 4,740 82,300 (12/) 116,000 1 287 W W W W W W W	

		1992		-		1993			94
Mineral	Quantity		Value		Quantity		Value	Quantity	Value
			(thousands)			(t	thousands)		(thousands)
Cement (portland) thousand metric tons	2,590		ILLINOIS \$110,000		2,430		\$123,000	2,590	\$151,000
4 ,	535		\$119,000		2,430 477			2,390 494	1,170
Clays 3/ do. Gemstones	NA		2,360 715		NA		1,090 328	NA	376
	NA		/13		NA		328	NA	370
Sand and gravel:	22 400		124 000		24.500	,	127.000 /	27.000	150,000
Construction thousand metric tons	32,400		124,000		34,500	e/	137,000 e/	37,900	150,000
Industrial do.	4,240	,	57,500	,	4,220		61,700	4,420	65,700
stone (crushed) 4/ do.	66,000	e/	323,000	e/	61,500		315,000	62,600	353,000
Combined value of barite, cement (masonry (1992, 1994)], clays (fuller's earth), copper,									
fluorspar, lead, lime, peat, silver, stone [crushed									
sandstone (1993), crushed sandstone and									
limestone (1992), crushed miscellaneous (1994),									
dimension (1992-93), dimension dolomite (1994)],									
zinc, and values indicated by symbol W	XX		108,000		XX		95,900	XX	102,000
Total	XX		734,000		XX		734,000	XX	823,000
			INDIANA						
Cement:									
Masonry thousand metric tons	337		24,800		W		W	W	W
Portland do.	2,240		111,000		2,060		109,000	2,290	132,000
Clays 3/ do.	842		3,020		600		2,540	774	2,540
Gemstones	NA		720		NA		47	NA	29
Peat thousand metric tons	25		512		24		W	23	W
Sand and gravel:			012					20	
Construction do.	26,200		95,900		27,000	e/	103,000 e/	28,100	108,000
Industrial do.	107		1,280		27,000 W	C/	W	20,100 W	W
Stone:	107		1,200		vv		**	**	VV
Crushed do.	39,000	2/	178,000	۵/	26,000		166 000	45 000	211 000
					36,900	4 /	166,000	45,900	211,000
Dimension metric tons	173,000	е/	26,800	e/	156,000	4/	22,900 4/	173,000	25,800
Combined value of clays (ball), gypsum (crude),									
lime, stone [dimension sandstone (1993)], and	3737		25.100		3737		60 100 /	3737	75.400
values indicated by symbol W	XX		35,100		XX		69,100 r/	XX	75,400
Total	XX		477,000		XX		472,000 r/	XX	555,000
_			IOWA						
Cement:									
Masonry thousand metric tons	45		4,120		W		W	W	W
Portland do.	2,560		116,000		2,300		136,000	2,390	153,000
Clays do.	389		1,610		358		1,670	384	1,520
Gemstones	NA		1,610		NA		46	NA	50
Gypsum (crude) thousand metric tons	1,990		11,600		1,990		12,300	2,210	12,700
Peat do.	W		W		W		W	5	W
Sand and gravel (construction)									
do.	15,300		58,400		16,600	e/	64,700 e/	15,300	58,200
Stone (crushed) do.	34,500	e/ 4/	186,000	e/ 4/	30,500		169,000	36,600	211,000
Combined value of lime, sand and gravel									
(industrial), stone crushed dolomite and									
limestone (1992), crushed dolomite and									
miscellaneous (1994), dimension], and values									
indicated by symbol W	XX		11,100		XX		13,900	XX	15,400
Total	XX		391,000		XX		398,000	XX	451,000
	71/1		KANSAS		71/1		370,000	71/1	131,000
Cement:			27 11 101 10						
Masonry thousand metric tons	31		1,910		35		2,410	24	2,090
	1,550		79,500		1,380		73,900	1,640	101,000
Portland do.						2/			
Clays do.	544		3,920		513	5/	1,970 3/	556 3/	2,150
Helium:									
	W		W		23		20,400	32	31,400
Crude million cubic meters									
Crude million cubic meters Grade-A do.	W		W		52		104,000	53	105,000
Crude million cubic meters Grade-A do. Salt thousand metric tons		13/	W 98,600	13/	52 2,320	13/	104,000 103,000 13/		105,000 108,000
Crude million cubic meters Grade-A do.	W	13/		13/		13/			

		1992			1993		199	
Mineral	Quantity		Value	Quantity		Value	Quantity	Value
			(thousands)		((thousands)		(thousands)
		KANS	SAS Continued					
Stone:								
Crushed thousand metric tons	15,300	e/ 4/	69,600 e/ 4/	- ,		90,700 4/	21,500	103,000
Dimension metric tons	W		W	24,700	4/	2,540 4/	23,700 4/	1,730 4
Combined value of clays [fuller's earth (1993-94)],								
gemstones, gypsum (crude), pumice, salt								
[brine (1992-93)], sand and gravel (industrial),								
stone [crushed quartzite (1992), crushed sandstone								
(1993), dimension (1992), dimension sandstone	WW		124,000	VV		12 (00	VV	11 000
(1993-94)], and values indicated by symbol W Total	XX XX		124,000 405,000	XX		12,600 442,000	XX	11,900 497,000
Total	ΛΛ	K	ENTUCKY	ΛΛ		442,000	AA	497,000
Clays 3/ thousand metric tons	760	15	3,780	768		3,060	820	3,460
Sand and gravel (construction)	700		3,700	700		3,000	020	3,400
do.	6,710		24,400	7,700	e/	29,900 e/	9,140	32,200
Stone (crushed) do.	53,300	e/	251,000 e/	49,000		226,000 4/	56,300	259,000
Combined value of cement, clays (ball), gemstones,			- ,	.,		-,	,=	,
lime, and stone [crushed sandstone (1993)]	XX		121,000	XX		128,000	XX	134,000
Total	XX	_	401,000	XX	_	388,000	XX	428,000
		L	OUISIANA					
Clays thousand metric tons	384		3,590	375		496	371	3,280
Gemstones	NA		3,960	NA		141	NA	155
Salt thousand metric tons	12,100		112,000	12,400		115,000	13,500	140,000
Sand and gravel:								
Construction do.	11,500		48,700	11,900	e/	51,500 e/	12,300	49,600
Industrial do.	471		9,270	465		9,360	454	9,320
Stone (crushed) do.	W		W	W		W	707 4/	7,710 4
Sulfur (Frasch) do.	1,110		W	740		W	W	W
Combined value of gypsum (crude), lime, stone								
[crushed limestone, shell, and miscellaneous								
(1993), crushed shell and miscellaneous								
(1000 1004)1 1 ! 1! 1 W	WW		121 000	vv		£4.600	W	144,000
(1992,1994)], and values indicated by symbol W	XX		131,000	XX		54,600	XX	144,000
(1992,1994)], and values indicated by symbol W Total	XX XX		309,000	XX XX		54,600 232,000	XX XX	144,000 354,000
Total	XX		309,000 MAINE	XX		232,000	XX	354,000
Total Gemstones			309,000					
Total Gemstones Sand and gravel (construction)	NA NA		309,000 MAINE 108	NA NA	e/	232,000 9,690	NA NA	354,000 235
Total Gemstones Sand and gravel (construction) thousand metric tons	NA 6,080	e/	309,000 MAINE 108 26,900	NA 4,400	e/	232,000 9,690 18,900 e/	NA 5,890	354,000 235 24,400
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do.	NA NA	e/	309,000 MAINE 108	NA NA	e/	232,000 9,690	NA NA	354,000 235
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat,	NA 6,080 1,720	e/	309,000 MAINE 108 26,900 11,400 e/	NA 4,400 1,830	e/	9,690 18,900 e/ 10,400	XX NA 5,890 2,740	354,000 235 24,400 15,500
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do.	NA 6,080	e/	309,000 MAINE 108 26,900 11,400 e/	NA 4,400	e/	232,000 9,690 18,900 e/	NA 5,890	354,000 235 24,400
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension)	NA 6,080 1,720 XX		309,000 MAINE 108 26,900 11,400 e/	NA 4,400 1,830 XX	e/	9,690 18,900 e/ 10,400 21,200	XX NA 5,890 2,740 XX	354,000 235 24,400 15,500 20,900
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension)	NA 6,080 1,720 XX		309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900	NA 4,400 1,830 XX	e/	9,690 18,900 e/ 10,400 21,200	XX NA 5,890 2,740 XX	354,000 235 24,400 15,500 20,900
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total	NA 6,080 1,720 XX XX		309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND	NA 4,400 1,830 XX XX	e/	9,690 18,900 e/ 10,400 21,200 60,100	XX NA 5,890 2,740 XX XX	354,000 235 24,400 15,500 20,900 61,000
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons	XX NA 6,080 1,720 XX XX 1,510		309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200	XX NA 4,400 1,830 XX XX 1,630	e/	9,690 18,900 e/ 10,400 21,200 60,100 81,600	XX NA 5,890 2,740 XX XX 1,710	354,000 235 24,400 15,500 20,900 61,000
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do.	XX NA 6,080 1,720 XX XX 1,510 227		309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980	XX NA 4,400 1,830 XX XX 1,630 294	e/	232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705	XX NA 5,890 2,740 XX XX 1,710 293	354,000 235 24,400 15,500 20,900 61,000 90,700 946
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones	XX NA 6,080 1,720 XX XX 1,510 227		309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980	XX NA 4,400 1,830 XX XX 1,630 294		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705	XX NA 5,890 2,740 XX XX 1,710 293	354,000 235 24,400 15,500 20,900 61,000 90,700 946
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone:	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900	M	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300	XX NA 4,400 1,830 XX XX 1,630 294 NA 11,200		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do.	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600	M e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/	XX NA 4,400 1,830 XX XX 1,630 294 NA 11,200 23,100		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300	M e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300 XX	M e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4 24,000
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300	M e/ e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals Total	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300 XX XX XX	M e/ e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000 SACHUSETTS	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX XX XX		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680 314,000	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX XX XX	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4 24,000 340,000
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals Total Gemstones	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300 XX	M e/ e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX		232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4 24,000
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals Total Gemstones Sand and gravel:	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300 XX XX XX NA	M e/ e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000 SACHUSETTS 1	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX XX XX NA	e/	232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680 314,000	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX XX NA	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4 24,000 340,000
Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals Total Gemstones Sand and gravel: Construction thousand metric tons	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300 XX XX NA 10,900	M e/ e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000 SACHUSETTS 1 48,700	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX XX XX NA 10,800	e/	232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680 314,000 W 51,300 e/	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX XX NA 12,300	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 4 1,550 4 24,000 340,000 W 60,000
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals Total Gemstones Sand and gravel: Construction thousand metric tons	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300 XX XX XX NA	M e/ e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000 SACHUSETTS 1	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX XX XX NA	e/	232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680 314,000	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX XX NA	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4 24,000 340,000
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals Total Gemstones Sand and gravel: Construction thousand metric tons Industrial do. Stone:	XX NA 6,080 1,720 XX XX 1,510 227 NA 10,900 21,600 10,300 XX XX NA 10,900 8	e/ e/ MAS	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000 SACHUSETTS 1 48,700 151	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX XX XX NA 10,800 2	e/	232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680 314,000 W 51,300 e/ 42	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX XX NA 12,300 W	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 162,000 4 1,550 4 24,000 340,000 W 60,000 W
Total Gemstones Sand and gravel (construction) thousand metric tons Stone (crushed) do. Combined value of cement, clays (common), peat, and stone (dimension) Total Cement (portland) thousand metric tons Clays do. Gemstones Sand and gravel (construction) thousand metric tons Stone: Crushed do. Dimension metric tons Combined value of other industrial minerals Total Gemstones Sand and gravel: Construction thousand metric tons	XX NA 6,080 1,720 XX XX XX 1,510 227 NA 10,900 21,600 10,300 XX XX NA 10,900	e/ e/	309,000 MAINE 108 26,900 11,400 e/ 17,500 55,900 IARYLAND 84,200 980 1 69,300 180,000 e/ 1,020 e/ 3,470 339,000 SACHUSETTS 1 48,700	XX NA 4,400 1,830 XX XX XX 1,630 294 NA 11,200 23,100 19,300 XX XX XX NA 10,800	e/	232,000 9,690 18,900 e/ 10,400 21,200 60,100 81,600 705 1 72,200 e/ 152,000 2,020 4,680 314,000 W 51,300 e/	XX NA 5,890 2,740 XX XX XX 1,710 293 NA 8,920 24,100 4/ 18,800 4/ XX XX NA 12,300	354,000 235 24,400 15,500 20,900 61,000 90,700 946 1 61,200 4 1,550 4 24,000 340,000 W 60,000

No. 1	0	1992	37.1		1993			994
Mineral	Quantity		Value	Quantity	Value		Quantity	Value
	MA		thousands) USETTS Con	tinuad	(thousands)			(thousands)
Combined value of clays (common), lime, peat,	MA	ззасн	USE115 Con	nnuea				
and stone [crushed dolomite and miscellaneous								
(1993)], and values indicated by symbol W	XX		12,100	XX	11,300		XX	10.600
Total	XX		147,000	XX	160,000		XX	178,000
Total	ΛΛ	λ.	IGHIGAN	AA	100,000		AA	178,000
Cement:		10	nemoart					
Masonry thousand metric tons	212		20,400	216	17,400		235	17,700
Portland do.	5,000		262,000	5,120	313,000		5,160	331,000
Clays do.	1,260		4,350	1,230	4,850		1,150	3,370
Gemstones	NA		1,550	NA	1,030		NA	2,370
Gypsum (crude)	1,610		13,900	1,690	14,200		1,790	15,300
Iron ore (usable) thousand metric tons	12,900		W	12,900	W		13,800	W
Lime do.	577		31,300	617		r/	637	33,000
Peat do.	181		5,890	186	6,110		156	5,090
Sand and gravel:			,,,,,,		-,			- ,
Construction do.	43,500		143,000	45,000	e/ 158,000	e/	48,800	160,000
Industrial do.	1,950		22,600	2,570	25,100		2,870	31,300
Stone:	,		,	ŕ	,			
Crushed do.	35,000	e/	126,000 e/	31,000	112,000		35,000	113,000
Dimension do.	W		W	W	W		147 4	/ 35
Combined value of calcium chloride [natural 4/								
(1992)], copper, iron oxide pigments (crude),								
magnesium compounds, potash, salt, silver, stone								
(dimension), and values indicated by symbol W	XX		961,000	XX	823,000		XX	719,000
Total	XX		1,590,000	XX	1,510,000	r/	XX	1,430,000
		M	INNESOTA					
Gemstones	NA		686	NA	65		NA	26
Iron ore (usable) thousand metric tons	42,300		1,180,000	42,500	1,130,000		43,300	1,160,000
Peat do.	36		2,760	33	1,930		37	3,010
Sand and gravel (construction)								
do.	34,100		98,700	30,500	e/ 85,400	e/	29,500	90,000
Stone:								
Crushed do.	9,530	e/	39,500 e/	9,420	37,700		10,900	47,100
Dimension metric tons	32,800	e/	11,400 e/	33,500	11,800		16,900 4	/ W
Combined value of clays (common, kaolin), lime,								
sand and gravel industrial), and values indicated								
by symbol W	XX		30,400	XX	35,500		XX	44,900
Total	XX		1,360,000	XX	1,300,000	r/	XX	1,340,000
			IISSISSIPPI					
Clays thousand metric tons	1,120	3/	38,100 3/	1,100	34,300	r/	1,190 3	- ,
Gemstones	NA		1	NA	1		NA	1
Sand and gravel (construction)								
thousand metric tons	10,400		44,100	14,500		e/	12,400	53,200
Stone (crushed) do.	2,270	e/	10,400 e/	2,100	8,120		1,900	7,500
Combined value of other industrial minerals	XX		28,800	XX	(12/)		XX	33,900
Total	XX		121,000	XX	99,800	11/ r/	XX	135,000
		N	MISSOURI		***		. ===	****
Cement (portland) thousand metric tons	4,290		196,000	4,060	201,000		4,730	265,000
Clays 3/ do.	1,200		8,330	1,180	7,740		1,250	7,910
Copper 4/ metric tons	10,800		25,500	6,980	14,100		7,720	18,900
Gemstones	NA		862	NA 207	46		NA	67
fron ore (usable) thousand metric tons	19		W	287	W		W	W
Lead 4/ metric tons	300,000		232,000	277,000	194,000		290,000	238,000
Sand and gravel:								
Construction thousand metric tons	8,190		26,500	6,400		e/	9,760	36,500
Industrial do.	644		10,900	520	9,390		559	9,970
Silver 4/ metric tons	32		4,080	40	5,580		40	6,860
Stone (crushed) thousand metric tons	47,400	e/	187,000 e/	53,400	239,000		68,900	330,000
Zinc 4/ metric tons	44,000		56,700	40,200	40,900		42,000	45,600

		1992		199		199	
Mineral	Quantity		Value	Quantity	Value	Quantity	Value
			thousands)		(thousands)		(thousands)
		MISSO	URI Continued				
Combined value of barite, cement (masonry),							
clays (fuller's earth), iron oxide pigments (crude),							
lime, stone [dimension (1992), dimension (granite)],							
and values indicated by symbol W	XX		148,000	XX	123,000	XX	128,000
Total	XX		897,000	XX	855,000	XX	1,090,000
			IONTANA				
Clays thousand metric tons	35	3/	101 3/	W	W	28 3/	W
Gemstones	NA		674	NA	281	NA	3,400
Gold 5/ kilograms	14,000		155,000	14,300	166,000	12,600 6/	156,000 6
Lead 5/ metric tons	W		W	W	W	9,940	8,140
Palladium kilograms	6,470		18,100	6,500	25,300	6,440	29,400
Platinum do.	1,840		21,100	1,800	21,400	1,960	25,300
Sand and gravel (construction)							
thousand metric tons	10,100		31,400	10,000 e/	32,000 e/	7,360	28,800
Silver 5/ metric tons	197		25,000	127	17,600	71	12,000
Stone (crushed) thousand metric tons	2,000	e/	6,200 e/	2,820	10,400	2,320	8,830
Talc and pyrophyllite metric tons	408,000		16,200	350,000	11,900	W	W
Zinc 5/ do.	20,600		26,500	W	W	21,000	22,800
Combined value of barite, cement [masonry							
(1992,1994), portland], clays [bentonite, common							
(1993-94), fire (1993-94)], copper, iron ore [usable							
(1992-93)], lime, molybdenum, peat, phosphate							
rock (1992-93), sand and gravel (industrial), stone							
[dimension(1992), dimension miscellaneous							
(1993-94)], vermiculite (1992), and values indicated							
by symbol W	XX		239,000	XX	199,000	XX	249,000
Total	XX		539,000	XX	484,000	XX	543,000
		N	EBRASKA		•		
Clays thousand metric tons	183		879	192	932	206	867
Gemstones	NA		645	NA	W	NA	W
Lime thousand metric tons	26		1,740	24	1,230	24	904
Sand and gravel (construction)							
do.	12,000		38,100	12,900 e/	41,900 e/	15,000	49,200
Stone (crushed) do.	5,350	e/	29,100 e/	6,760	38,900	6,890	41,600
Combined value of cement, sand and gravel	- ,		,	-,	,	.,	,
(industrial), and values indicated by symbol W	XX		44,300	XX	43,200	XX	53,600
Total	XX		115,000	XX	126,000	XX	146,000
		1	NEVADA		,		,
Barite thousand metric tons	W		W	242	9,100	284	\$5,020
Clays 3/ do.	51		7,720	16	3,430	7	2,860
Copper 5/ metric tons	W		W	W	W	6,450	15,800
Gemstones Heart tons	NA		661	NA	660	NA	160
Gold 5/ kilograms	203,000		2,260,000	211,000	2,450,000	214,000 6/	2,650,000 6
Mercury metric tons	64		373	W W	2,430,000 W	W W	2,030,000 0 W
Sand and gravel:	0-1		3,3	• • •	• • • • • • • • • • • • • • • • • • • •	**	**
Construction thousand metric tons	22,000		93,600	24,900 e/	108,000 e/	22,700	106,000
Industrial do.	482		93,000 W	480	W W	572	100,000 W
Silver 5/ metric tons	614		77,700	713	98,500	673	115,000
Stone (crushed) thousand metric tons	1,090	e/	6,700 e/	1,070	12,500	2,310	20,600
Combined value of brucite, cement (portland),	1,090	Ci	0,700 6/	1,070	12,300	2,310	20,000
clays [fuller's earth (1993-94), kaolin], diatomite,							
• • • • • • • • • • • • • • • • • • • •							
fluorspar (1993), gypsum (crude), lime, lithium minerals, magnesite, perlite, salt, and values							
minerals, magnesite, periite, salt, and values	3737		149.000	3737	144,000 /	3737	152.000
	XX		148,000 2,590,000	XX	144,000 r/	XX	153,000
indicated by symbol W	3737		Z. 590.000	XX	2,820,000 r/	XX	3,070,000
	XX	3.77777					
indicated by symbol W Total		NEW	HAMPSHIRE			_	
indicated by symbol W Total Clays thousand metric tons	W	NEW	HAMPSHIRE W	3	16	3	16
indicated by symbol W Total Clays thousand metric tons Gemstones		NEW	HAMPSHIRE	3 NA	16 9	3 NA	16 21
indicated by symbol W Total Clays thousand metric tons	W	NEW	HAMPSHIRE W				

$\label{thm:table 6--} TABLE\,6-- Continued \\ NONFUEL\,RAW\,MINERAL\,PRODUCTION\,1/\,2/\,IN\,THE\,UNITED\,STATES,\,BY\,STATE$

M:1		One-+'-	1992	Value	Overtity:		199	<u> </u>
Mineral		Quantity	,	Value	Quantity	Value	Quantity	Value
		N.T.		thousands)	1	(thousands)		(thousands)
Stone:		INE	W HAM	PSHIRE Conti	nuea			
Crushed thousand m	natric tons	1,540	9/	\$11,000 e/	1,390	\$7,790	1,390 4/	\$7.470 4
	netric tons	34,200		5,460 e/	53,100	8,670	35,300	6,300
Combined value of other industrial minerals and		34,200	C/	3,400 6/	33,100	8,070	33,300	0,300
values indicated by symbol W	J	XX		(12/)	XX		XX	(12/)
Total		XX		42.000 11/	XX	37,200	XX	46,400 1
Total		ΛΛ	NI	EW JERSEY	AA	37,200	AA	40,400 1
Gemstones		NA	INI	1	NA	1	NA	1
Sand and gravel:		IVA		1	IVA	1	INA	1
Construction thousand m	natric tons	14,900		80,000	14,700 e/	80.100 e/	16,100	100,000
Industrial Industrial	do.	1,380		24,700	1,830	28,600	1,690	30,600
Stone (crushed)	do.	15,500	0/1/	126,000 e/4/	16,700 4/	138,000 4/	19,800	154,000
Combined value of clays [common, fire (1992-9		13,300	C/ 4 /	120,000 6/4/	10,700 4/	136,000 4/	19,800	134,000
greensand marl, peat, stone [crushed sandstone								
and miscellaneous (1992-93)], titanium	7							
concentrates (ilmenite and rutile, 1992), and								
zircon concentrates (1992)		XX		9,720	XX	15,700	XX	4,460
Total		XX		240,000	XX	262,000	XX	289,000
10111		ΛΛ	NE	W MEXICO	ΛΛ	202,000	АА	207,000
Clays 3/ thousand m	netric tons	33	INE	79	33	101	127	269
•	netric tons	211,000		501,000	224,000	453.000	234,000	574,000
Gemstones	icure tons	211,000 NA		34	NA	10	NA	14
	kilograms	W		W	995	11,600	W	W
Potash thousand m		1,440		257,000	1,310	216,000	2,450	218,000
	netric tons	1,440 W		237,000 W	W W	W W	129,000	1,050
Sand and gravel (construction)	icure tons	**		vv	**	**	129,000	1,030
thousand m	netric tons	10,200		46,200	11,100 e/	51,100 e/	10,400	47,400
	netric tons	10,200 W		40,200 W	22	3,090	22	3,750
Stone (crushed) thousand m		2,720	0/	14,400 e/	3,500 4/	18,400 4/	3,550 4/	20,000 4
mica (scrap), molybdenum, perlite, salt, stone [crushed quartzite (1993), crushed quartzite ar traprock (1994), dimension (1992-93), dimension granite, marble, and miscellaneous (1994], and	sion							
values indicated by symbol W	ı	XX		53,500	XX	51,200	XX	65,100
Total		XX		871,000	XX	804,000	XX	929,000
Total		7171	N	EW YORK	71.71	004,000	AA	727,000
Cement:				211 101111				
Masonry thousand m	netric tons	W		W	75	5,420	82	6.020
Portland	do.	W		W	2,970	149,000	2,650	139,000
Clays	do.	415		2,410	508	9,250	507	9,270
Gemstones		NA		170	NA	W	NA	W
Peat thousand m	netric tons	W		W	W	W	(9/)	12
Salt	do.	4,700		165,000	5,620	191,000	W	W
Sand and gravel (construction)		,		,	- ,-	,,,,,,,		
g ()	do.	28,500		130,000	34,900 e/	162,000 e/	28,000	138,000
Stone:		- 7		,	, "	,	,	,
Crushed	do.	33,400	e/	213,000 e/	38,400	223,000 4/	39,400	239,000
	netric tons	16,500		2,780 e/	19,300	3,440	24,600 4/	7,370 4
Combined value of emery (1993), garnet (abras gypsum (crude), lead, sand and gravel (industrial), silver, stone [crushed traprock (19 dimension granite and quartz(1994)], talc and pyrophyllite, wollastonite, zinc, and values	sive),	10,000	C)	2,700 0	13,000	5,	21,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
indicated by symbol W		XX		253,000	XX	108,000	XX	354,000
Total		XX		766,000	XX	852,000	XX	892,000
		71/1	NORT	TH CAROLINA	71/1	052,000	71/1	0,2,000
Clays 3/ thousand m	netric tons	2,120		9,780	2,380	11,200	2,530	12,500
-	netric tons	439,000		15,500	472,000	16,700	488,000	17,600
Gemstones		NA		1,220	NA	546	NA	565
See footnotes at end of table.								

No. 1		1992		199		199		
Mineral	Quantity	,	Value	Quantity	Value	Quantity	Value	
	NO		thousands) ROLINA Conti	nuad	(thousands)		(thousands)	
Mica (scrap) metric tons	51	KIIICA	\$2,970	51	\$2,700	68	\$3,270	
Peat thousand metric tons	W		108	W	162	21	φ3,270 W	
Sand and gravel:	**		100	**	102	21	**	
Construction do.	9,280		42,700	11,100 e/	53,800 e/	11,100	50,700	
Industrial do.	1,090		17,500	1,340	18,600	1,460	24,200	
Stone:	1,000		17,500	1,510	10,000	1,100	21,200	
Crushed 4/ do.	44,100	e/	262,000 e/	47,800	298,000	53,900	351,000	
Dimension metric tons	23,000		7,470 e/	31,700	12,300	33,700	12,500	
Combined value of clays (kaolin), lithium minerals,	,		.,	22,100	,	,	,	
olivine, phosphate rock, stone [crushed quartzite,								
sandstone, slate, and miscellaneous (1994),								
crushed quartzite, slate, and volcanic cinder (1993),								
crushed volcanic cinder (1992)], talc and								
pyrophyllite, and values indicated by symbol W	XX		236,000	XX	204,000	XX	236,000	
Total	XX		596,000	XX	617,000	XX	708,000	
		NOR	TH DAKOTA				-	
Clays thousand metric tons	W		W	W	W	59	W	
Gemstones	NA		643	NA	W	NA	W	
Lime thousand metric tons	101		4,290	W	4,800 r/	W	6,590	
Peat do.	W		W	(9/)	W	W	W	
Sand and gravel (construction)								
do.	7,930		20,600	7,700 e/	20,400 e/	6,810	18,500	
Stone (crushed) do.	10	e/	W	W	W			
Combined value of clays (common), sand and								
gravel (industrial), stone (crushed volcanic								
cinder), and values indicated by symbol W	XX		210	XX	131	XX	199	
Total	XX		25,800	XX	25,300 r/	XX	25,300	
			OHIO					
Cement:	102		10.200	0.2	11 200	***	***	
Masonry thousand metric tons	103		10,300	93	11,300	W	W	
Portland do.	1,320		77,100	1,490	90,300	1,050	69,700	
Clays do.	2,290		12,100	2,160 3/	12,000 3/	2,080	12,500	
Gemstones Lime thousand metric tons	NA 1.670		5 96,700	NA 1,700	5 101,000	NA	43 113,000	
	1,670		96,700	1,700	101,000	1,850	113,000	
Sand and gravel: Construction do.	42,900		178,000	46,400 e/	203,000 e/	47,700	205,000	
Industrial do.	1,280		26,400	1,360	27,500 e/	1,260	27,700	
Stone:	1,200		20,400	1,300	27,300	1,200	27,700	
Crushed do.	44,000	e/ 1/	195,000 e/4/	52,200	228,000	56,400	251,000	
Dimension metric tons	31,800		2,240 e/	25,700 4/	1,210 4/	36,400 W	231,000 W	
Combined value of clays [ball (1993-94)], gypsum	21,000	G	2,240 0	23,700 4/	1,210 4/	**	**	
(crude), peat, salt, silica stone 8/(1992-93), stone								
[crushed limestone and dolomite (1992), dimension								
limestone (1993)], and values indicated by								
symbol W	XX		145,000	XX	176,000	XX	201,000	
Total	XX		742,000	XX	851,000	XX	880,000	
		O	KLAHOMA		·			
Cement:								
Masonry thousand metric tons	W		W	85	6,720	91	7,410	
Portland do.	931		39,300	1,700	77,600	1,680	102,000	
Clays do.	622		3,300	613	2,940	771	3,910	
Gemstones	NA		1,860	NA	W	NA	W	
Gypsum (crude) thousand metric tons	2,360		14,900	2,650	15,400	2,890	17,000	
Iodine (crude) metric tons	2,000		20,900	1,940	15,400	1,630	12,800	
Sand and gravel:	,		•	•	•	,	,	
Construction thousand metric tons	8,980		24,200	9,700 e/	27,300 e/	8,480	27,200	
Industrial do.	972		19,000	1,210	23,200	1,230	24,000	
Stone:							•	
Crushed do.	24,900	e/ 4/	105,000 e/4/	27,100	114,000	29,900	125,000	
Dimension metric tons	4,700		706 e/	2,350 4/	838 4/	3,980 4/	1,250	
Can footnotes at and of table	•					· · · · · · · · · · · · · · · · · · ·		

$\label{thm:table 6--} TABLE\,6-- Continued \\ NONFUEL\,RAW\,MINERAL\,PRODUCTION\,1/\,2/\,IN\,THE\,UNITED\,STATES,\,BY\,STATE$

			1992		_	1993		199	
Mineral		Quantity		Value		Quantity	Value	Quantity	Value
				(thousands)	1		(thousands)		(thousands)
Combined value of feldspar, lime, salt,	ctone		OKLAH	IOMA Contin	iuea				
crushed granite (1992), dimension lim									
sandstone (1993)], crushed sandstone									
tripoli, and values indicated by symbo		XX		23,100		XX	14,900	XX	19,400
Total		XX		253,000		XX	298,000	XX	340,000
				OREGON					
Clays the	ousand metric tons	203	3/	326 3/		221	1,410	240	1,560
Copper 5/	metric tons	152		361		703	1,420	106	260
Gemstones		NA		2,720		NA	2,140	NA	2,160
Nickel ore 14/	metric tons	6,670		W		2,460	W		
Pumice	do.	W		W		W	W	220,000	2,760
Sand and gravel (construction)									
the	ousand metric tons	15,000		69,500		15,800 e/	74,800 e/	18,400	83,600
Silver 5/	metric tons	(9/)		1				(6/)	10
,	ousand metric tons	15,200	e/ 4/	74,900 e/	4/	18,900	84,700	18,900	90,100
Talc and pyrophyllite	metric tons	64		67		64	67	W	W
Zinc 5/	do.							118	128
Combined value of cement [masonry (1	//								
portland], clays [bentonite (1992)], di									
emery, gold 6/ (1992,1994), lime, stor	-	****				****	61.600		60 100
slate (1992)],and values indicated by	symbol W	XX		66,300		XX	61,600	XX	62,100
Total		XX	DEA	214,000		XX	226,000	XX	243,000
Comonti			PEN	INSYLVANIA					
Cement:	useed metric tone	206		21 000		248	19.700	245	10.200
	ousand metric tons	296 5.020		21,900 259,000			18,700 283,000	5.630	19,300
Portland	do.	5,020 649		3,460		5,370 765	3,780	3,630 811	315,000 4,040
Clays Gemstones	uo.	NA		3,400		NA	3,780	NA	4,040
	ousand metric tons	1,510		94,500		1.540	95,400	1.590	95,500
Peat	do.	1,510		250		1,540	249	1,590	296
Sand and gravel (construction)	<u>uo.</u>	13		230		,	24)	10	270
Sand and graver (construction)	do.	17,500		94,600		16,100 e/	83,900 e/	15,900	89,700
Stone:	<u>uo.</u>	17,500		74,000		10,100 6	03,700 G	15,700	07,700
Crushed	do.	65,000	e/ 4/	380,000 e/	4/	69,400 4/	405,000 4/	76,700	462,000
Dimension	metric tons	37,900		10,800 e/	.,	35,700	9,890	43,700 4/	7,280 4
Combined value of sand and gravel (inc		,		,		,	.,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,
stone [crushed dolomite, limestone, ar	* *								
(1992), crushed quartzite (1993), dim	ension								
quartzite and slate (1994)], and tripoli	i	XX		16,200		XX	13,200	XX	13,300
Total		XX		881,000		XX	913,000	XX	1,010,000
			RH	ODE ISLAND					
Gemstones		NA		1		NA	1	NA	1
Sand and gravel (construction)									
	ousand metric tons	2,230		12,000		2,500 e/	13,900 e/	2,310	14,200
Stone (crushed)	do.	1,360	e/	9,500 e/		1,290	9,250	1,610	12,200
Total 11/		XX		21,500		XX	23,200	XX	26,300
			SOU.	TH CAROLINA	4				
	ousand metric tons	2,080		93,400		2,130	109,000	2,210	143,000
Clays	do.	1,610		27,700		1,540	31,300	1,520 3/	30,400 3
Gemstones		NA		641		NA	W	NA	W
Gold 5/	kilograms	6,750		74,800		W	W	W	W
Sand and gravel:	1	. 2		10.000		6,000	21.000	0.500	26.100
	ousand metric tons	6,260		19,900		6,800 e/	21,800 e/	8,600	26,100
Industrial	do.	770	-/4/	17,300	4.7	749	19,000	699	18,100
Stone (crushed)	<u>do.</u>	16,000	e/ 4/	83,800 e/	4/	19,800	121,000	20,000 4/	128,000 4
Combined value of cement (masonry),	0								
ore, mica (scrap), peat, silver, stone [c									
dolomite (1992), crushed marble (199	* *								
(1992-93), dimension granite (1994)]	, vermiculite	1/1/		20.200		vv	00 700	W	97.700
and values indicated by symbol W		XX		29,300		XX	88,700	XX	87,700
Total		XX		347,000		XX	391,000	XX	433,000

			1992				1993		199	
Miner	al	Quantity		Value		Quantity		Value	Quantity	Value
				thousands)			((thousands)		(thousands)
~		371	SOU	TH DAKOT	ΊA					
Gemstones		NA		\$967		NA		\$163	NA	\$110
Gold 5/	kilograms	18,700		207,000		19,200		223,000	W	W
Sand and gravel (construction)		7.510		22.200		0.200	,	25.000	7.700	22.700
63 57	thousand metric tons	7,510		22,200		8,300	e/	25,000 e/	7,700	23,700
Silver 5/	metric tons	6	,	802	,	5	4./	651	5 470 4/	696
Stone (crushed)	thousand metric tons	4,080	e/	18,900	e/	4,230	4/	18,700 4/	5,470 4/	24,500 4
Combined value of cement, cla feldspar, gypsum [crude, (199 (usable), lime, mica (scrap), s sandstone and miscellaneous miscellaneous (1994), dimen dimension granite (1994)], ar	92-93)], iron ore stone [crushed (1993), crushed sion (1992-93),									
symbol W	•	XX		50,600		XX		69,400	XX	275,000
Total	-	XX		301,000		XX		337,000	XX	324,000
			Tl	ENNESSEE				,		
Clays 3/	thousand metric tons	574		24,100		607		25,700	665	28,600
Gemstones	<u></u>	NA		23,300		NA		21,800	NA	23,100
Sand and gravel:				•						•
Construction	thousand metric tons	7,690		35,100		7,200	e/	34,000 e/	8,710	38,000
Industrial	do.	614		10,700		644		11,700	660	11,600
Stone:										
Crushed	do.	42,400	e/	244,000	e/	43,500		227,000	49,200	265,000
Dimension	metric tons	3,080	e/	320	e/	4,550		552	W	W
Combined value of barite (199	94), cement, clays									
(bentonite, common, fuller's e	earth), copper, lead,									
lime, silver, stone [dimension	marble (1994)], zinc,									
and value indicated by symbo	ol W	XX		238,000		XX		189,000	XX	235,000
Total		XX		576,000		XX		510,000	XX	602,000
				TEXAS						
Cement:										
Masonry	thousand metric tons	W		W		245		18,400	258	18,200
Portland	do.	6,840		309,000		8,130		398,000	8,620	456,000
Clays 3/	do.	2,240		12,600		2,180		17,400	2,190	13,700
Gemstones		NA		3,830		NA		400	NA	448
Gypsum (crude)	thousand metric tons	1,620		9,920		1,760		10,100	1,870	10,100
Helium (crude)	million cubic meters	W		W		6		5,390	7	7,050
Lime	thousand metric tons	1,340		83,400		1,370	r/	86,400 r/	1,210	76,200
Salt	do.	7,990		76,100		8,250		76,100	8,040	70,500
Sand and gravel:										
Construction	do.	41,400		166,000		47,100	e/	195,000 e/	56,700	242,000
Industrial	do.	1,390		26,500		1,430		28,600	1,570	37,900
Stone (crushed)	do.	64,700	e/	253,000	e/	70,800		279,000	76,100	300,000
Sulfur (Frasch)	do.	1,500		W		1,160		W	W	W
Talc and pyrophyllite	metric tons	236,000		5,720		236,000		5,660	225,000	5,860
Combined value of clays [ball,										
earth, kaolin), fluorspar (199	//									
iron ore (usable), magnesium										
magnesium metal, sodium su	* **									
[dimension (1992-93), dimen										
limestone (1994)], and value	s indicated by									
symbol W		XX		357,000		XX		311,000	XX	295,000
Total		XX		1,300,000		XX		1,430,000 r/	XX	1,530,000
				UTAH						
Beryllium concentrates	metric tons	4,830		5		4,940		5	4,330	5
Clays 3/	thousand metric tons	243		2,710		216		3,130	243	3,410
Gemstones		NA		634		NA		1,160	NA	620
Potash	thousand metric tons	W		W		210		49,700	W	W
Salt	do.	1,370		44,500		2,250		46,800	1,680	56,700
Sand and gravel (construction))									
	do.	16,000		54,800		16,000	e/	56,000 e/	21,100	69,600
Can footmaten at and of table										

$\label{thm:table 6--} TABLE\,6-- Continued \\ NONFUEL\,RAW\,MINERAL\,PRODUCTION\,1/\,2/\,IN\,THE\,UNITED\,STATES,\,BY\,STATE$

		1992		93	199	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
		(thousands)		(thousands)		(thousands)
		UTAH Continued				
Silver 5/ metric tons	W	W	135	\$18,700	W	W
Stone (crushed) thousand metric tons	4,810	e/ \$22,400 e/	4,560	29,400	4,540	\$19,800
Combined value of cement, clays [bentonite,						
Fuller's earth (1992-93)], copper, gold, 5/ gypsum						
(crude), helium [Grade-A, (1994)], iron ore (usable),						
lime, magnesium compounds, magnesium metal,						
mercury, molybdenum, phosphate rock, sodium						
sulfate [natural (1992-93)], stone [dimension (1993),						
dimension quartzite and sandstone (1994)], and						
values indicated by symbol W	XX	1,220,000	XX	1,110,000	XX	1,370,000
Total	XX	1,350,000	XX	1,310,000	XX	1,520,000
		VERMONT				
Asbestos metric tons	4,580	1,690	3,660	1,530	1,130	920
Gemstones	NA	1	NA	1	NA	1
Sand and gravel (construction)						
thousand metric tons	3,150	11,300	3,000 e/	10,400 e/	3,890	14,500
Stone:	_					
Crushed do.	2,270		2,520	12,900	4,170	23,700
Dimension metric tons	113,000		97,400	27,900	13,500 4/	9,500 4/
Total 11/	XX	59,800	XX	52,700	XX	48,600
		VIRGINIA			000	
Cement (portland) thousand metric tons	W	W	W	W	930	54,700
Clays 3/ do.	754	3,370	775	2,950	870	3,250
Lime do.	764	40,300	756	40,000	742	40,200
Sand and gravel (construction)	0.660	27.200	0.000	40.500	0.060	22 400
do.	8,660	37,300	9,000 e/	40,500 e/	8,060	33,400
Stone:	12 100	/ 261,000 /	51.000	202.000	56.700	227 000
Crushed do.	43,100		51,000	292,000	56,700	327,000
Dimension metric tons	W	W	W	W	108 4/	13 4/
Combined value of cement (masonry), clays [bentonite (1992-93), fuller's earth], feldspar,						
* * *						
gemstones, gypsum (crude), iron oxide pigments						
(crude), kyanite, sand and gravel (industrial), stone						
[dimension (1992-93), dimension granite and slate (1994)], talc and pyrophyllite, vermiculite, and						
values indicated by symbol W	vv	120,000	vv	88,900	vv	43,600
Total	$\frac{XX}{XX}$	462.000	XX XX	465,000	XX XX	502,000
Total	ΛΛ	WASHINGTON	ΛΛ	403,000	ΛΛ	302,000
Clays 3/ thousand metric tons	306	1,890	238	1,370	246	1,140
Gemstones thousand metric tons	NA	379	NA	24	NA	1,050
Gold 5/ kilograms	8,800	97,600	7,110	82,500	7,410 6/	91,800 6/
Lime thousand metric tons	W	W	213	W	239	V W
Peat do.	W	W	W	W	3	111
Sand and gravel (construction)	**	**	**	**	3	111
do.	37,100	141,000	40,200 e/	158,000 e/	39,600	165,000
Silver 5/ metric tons	W	W	14	1,940	W	W
Stone (crushed) thousand metric tons	12,200		13,200	68,600	15,500	86,100
Combined value of cement, clays (fire), diatomite,	12,200	. 05,200 0	12,200	00,000	12,500	55,100
lead (1992-93), magnesium metal, olivine, sand and						
gravel (industrial), stone [dimension (1992-93),						
dimension miscellaneous (1994)], zinc (1992-93),						
and values indicated by symbol W	XX	165,000	XX	193,000	XX	226,000
Total	XX	469,000	XX	505,000	XX	571,000
	7171	WEST VIRGINIA	7323	202,000	2121	2.1,000
Clays thousand metric tons	80	221	115	334	138	291
Gemstones	NA	1	NA	1	NA	1
Sand and gravel (construction)		•	- 1	•	- 11	-
thousand metric tons	1,260	5,730	1,400 e/	6,700 e/	1,380	5,970
Stone (crushed) do.	10,300		10,300 4/		12,300 4/	99,300
See footnotes at end of table	-,	- · ,- · · ·	- , //	,	,= ·	,

${\it TABLE~6--Continued}\\ {\it NONFUEL~RAW~MINERAL~PRODUCTION~1/2/IN~THE~UNITED~STATES,~BY~STATE}\\$

		1992			19	93	1	994
Mineral	Quantity		Value	Quant	ty	Value	Quantity	Value
		(tl	housands)			(thousands)		(thousands)
	W	EST VIR	GINIA Con	tinued				
Combined value of cement, lime, peat, salt, sand								
and gravel (industrial), and stone [dimension (1994)]	XX		47,800	,	ΚX	62,800	XX	75,500
Total	XX		112,000	,	ΚX	149,000	XX	181,000
		WI	SCONSIN					
Gemstones	NA		5]	ĪΑ	45	NA	53
Lime thousand metric tons	473		26,600	5	11	30,900	507	30,300
Peat do.	56		553		W	W	2	61
Sand and gravel:								
Construction do.	26,400		77,100	27,6	00 e/	82,800	e/ 29,200	91,500
Industrial do.	1,300		26,000	1,4	80	31,400	1,630	32,400
Silica stone 8/ metric tons	W		W		W	W	45	80
Stone:								
Crushed thousand metric tons	23,100	e/ 4/	89,300 e/	4/ 26,2	00	98,000	28,500	114,000
Dimension metric tons	32,800	e/	4,230 e/	122,0	00	13,100	125,000	14,100
Total 4/	XX		224,000		ΚX	256,000	XX	283,000
		W	YOMING					
Cement (portland) thousand metric tons	438		30,200		W	W	W	W
Clays 3/ do.	2,530		83,100	2,1	80 r/	63,300	r/ 2,530	91,300
Gemstones	NA		12]	ĪΑ	13	NA	13
Sand and gravel (construction)								
thousand metric tons	2,850		11,400	3,4	00 e/	15,000	e/ 3,210	13,100
Stone (crushed) do.	4,080	e/	19,900 e/	3,4	60	19,800	5,080	30,000
Combined value of cement [masonry (1992-93)],								
clays (common), gypsum [crude (1994)], helium								
(Grade-A), lime, soda ash, and values indicated								
by symbol W	XX		804,000		ΚX	746,000	XX	746,000
Total	XX		949,000	,	ΚX	844,000	r/ XX	880,000
		UNDI	STRIBUTED	1				
Delaware, Hawaii (1992), Mississippi (1993-94),								
New Hampshire (1992, 1994), Rhode Island,								
Vermont, and Wisconsin	XX		25,600 r/		ΚX	95,700	r/ XX	155,000

e/ Estimated. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data, value included with "Combined value" data. XX Not applicable.

- 1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
- 2/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits.
- 3/ Excludes certain clays; kind and value included with "Combined value" data.
- 4/ Excludes certain stones; kind and value included with "Combined value" data.
- 5/ Recoverable content of ores, etc.
- $6/\ Placer$ can vassing discontinued beginning 1994. May include placer data from other sources.
- 7/ Pyrites canvassing discontinued beginning 1994.
- 8/ Formerly identified as "abrasives." Grindstones, pulpstones, and sharpening stones; excludes mill liners and grinding pebbles.
- 9/ Less than 1/2 unit.
- 10/ Calcium chloride canvassing discontinued beginning 1993.
- 11/ Partial total, excludes values which must be concealed to avoid disclosing company proprietary data.
- 12/ Value excluded to avoid disclosing company proprietary data.
- 13/ Excludes salts in brines; value included with "Combined value" figure.
- 14/ The Riddle nickel smelter uses lateritic ore mined on Nickel Mountain, lateritic ore imported from New Caledonia, and small tonnages of recycled Ni-bearing catalysts. In 1989, the Glenbrook Nickel Co. purchased the idle mining and smelting complex and restarted the operation. Production of ferronickel on a contained Ni basis has been as follows: 1992–8,960 metric tons (mt) valued at \$62.7 million; 1993–4,880 mt valued at \$28.0 million; and in 1994 the Nickel Mountain mine was idle.

TABLE 7 NONFUEL RAW MINERAL PRODUCTION 1/ 2/ IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED BY THE UNITED STATES

		19	992	1	993	19	994
Mineral		Quantity	Value	Quantity	Value	Quantity	Value
			(thousands)		(thousands)		(thousands)
		PUERT	TO RICO				
Cement (portland)	thousand metric tons	1,300	\$120,000	1,310	\$72,600	W	W
Clays	do.	W	527	155	508	119	\$338
Lime	do.	27	3,720			23	2,970
Sand and gravel (industrial)	do.	W	W	58	1,400	W	W
Stone (crushed)	do.	NA	NA	7,850	51,100	10,500	78,400
Total		XX	124,000 3/	XX	126,000	XX	81,700 3/
		ADMINISTE	RED ISLANDS				
American Samoa: Stone (crushed)	thousand metric tons			83	W	84	W
Guam: Stone (crushed)	do.			1,370	15,100	2,150	12,700
Total		XX		XX	15,100 3/	XX	12,700 3/

e/Estimated. NA Not available. W Withheld to avoid disclosing company proprietary data; not included in "Total." XX Not applicable.

 ${\bf TABLE~8}$ U.S. EXPORTS OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS 1/

	199	3	199	94
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)
METALS				
Aluminum:				
Aluminum oxide (alumina, includes hydroxide [calcined equivalent])				
thousand metric tons	1,240	\$306,000	1,040	\$271,000
Crude and semicrude metric tons	1,210,000	2,230,000	1,370,000	2,730,000
Manufactures do.	98,500	270,000	138,000	352,000
Speciality compounds (aluminum sulfate, aluminum chloride, aluminum oxide				
abrasives, and various fluorine-based compounds) do.	52,200	NA	46,900	NA
Antimony:				
Metal, alloys, waste and scrap do.	315	871	1,350	7,470
Oxide (antimony content) do.	3,900	8,890	6,500	15,000
Arsenic metal do.	364	1,210	79	411
Bauxite (dried and calcined) thousand metric tons	85 r/	NA	114	NA.
Beryllium (alloys, wrought or unwrought, and waste and scrap)				
kilograms	19,700	1,760	28,500	2,700
Bismuth (metal, alloys, waste and scrap) do.	70,100	790	160,000	1,060
Cadmium:				
Metal do.	38,000	471	1,450,000	2,770
Sulfide do.	31,400	29,800	205,000	119,000
Chromium:				
Chemicals metric tons	20,000	34,900	29,500	44,000
Chromite ore and concentrate do.	10,000	2,140	47,100	3,550
Metal and alloys do.	15,700	18,400	12,400	16,500
Pigments do.	2,310	9,400	1,310	6,010
Cobalt:				
Metal (unwrought, powders, waste and scrap, and mattes and other intermediate				
products of metallurgy) do.	435	10,900	1,050	32,500
Metal (wrought and cobalt articles) do.	249	11,400	665	24,500
Ores and concentrates do.	9	78	71	558
Oxides and hydroxides do.	308	6,080	327	7,420
Other forms (acetates and chlorides) do.	563	4,100	309	2,930
Columbium:				
Ferrocolumbium do.	815	7,310	234	2,080
Ores and concentrates do.	6	46	489	4,500
Copper:				
Scrap (alloyed and unalloyed) do.	262,000	280,000	360,000	437,000
Semimanufactures [pipes and tubing, plates, sheets, foil, bars, bare wire (including	*	*	*	,
wire rod), wire and cable (stranded), and sulfate] do.	100,000	384,000	106,000	378,000
Unmanufactured (ore and concentrates, matte, ash and precipitates, refined,		,		
unalloyed scrap, blister and anodes) do.	578,000	854,000	596,000	943,000
See footnotes at end of table.			, ,	,

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

^{2/} Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

^{3/} Total does not include value of item withheld.

${\bf TABLE~8~-Continued}\\ {\bf U.S.~EXPORTS~OF~PRINCIPAL~MINERALS~AND~PRODUCTS,~EXCLUDING~MINERAL~FUELS~1/}$

	199		199	
Mineral METALS Continu	Quantity	Value (thousands)	Quantity	Value (thousands)
METALS Continu Gold:	ied			
Bullion (refined) kilograms	658,000	\$7,610,000	334,000	\$4,060,000
Doré and precipitates do.	67,500	686,000	60,600	677,000
Ores and concentrates do.	216	1,880	462	3,780
Waste and scrap do.	66,800	616,000	76,300	745,000
Iron ore thousand metric tons	5,060	167,000	4,890	163,000
Iron and steel:	3,000	107,000	4,650	103,000
Ferroalloys not elsewhere listed:				
Ferrophosphorous do.	1,810	1,040	29,100	4,960
Ferrozirconium do.	20	54	131	161
Ferroalloys (n.e.c.) do.	2,030	2,820	3,280	4,520
Products:	2,030	2,020	3,200	1,520
Cast iron and steel thousand metric tons	180	348,000	183	357,000
Fabricated steel do.	631	1,960,000	866	2,190,000
Steel mill do.	3,600	2,490,000	3,470	3,010,000
Other steel do.	57	44,300	(2/)	3,010,000
Scrap:	31	44,300	(2/)	(27)
*	17/	1 960 "/	17	1 950
Direct-reduced iron (steelmaking grade) do.	17 r/ 27	1,860 r/	17 56	1,850
Pig iron do.	21	3,040	36	6,780
Heavy melting, bundles, shredded steel, borings, shovelings, and turnings, cut				
plate and structural, tinned (iron or steel), remelting ingots, stainless steel, other	6.010	1 220 000	0.010	1.250.000
steel (alloys, tinplate and template) do.	9,810	1,320,000	8,810	1,270,000
Ships, boats, and other vessels for scrapping thousand metric tons	162	13,200	106	9,420
Used rails for rerolling and other uses [includes mixed (used plus new) rails]				
do.	43	11,800	35	8,900
Lead:				
Ash and residues (lead content) metric tons	1,730	1,330	20,600	11,100
Ore and concentrate (lead content) do.	41,800	7,840	38,700	11,200
Scrap do.	54,100	14,400	88,100	24,500
Unwrought metal and alloys (lead content) do.	51,400	32,200	48,200	29,500
Wrought metal and alloys (lead content) do.	7,140	19,700	5,340	19,300
Magnesium:				
Alloys do.	1,950	8,220	5,630	16,900
Metal do.	26,500	71,900	25,600	65,700
Powder, sheets, tubing, ribbons, wire, and other forms do.	8,340	18,800	12,100	21,000
Waste and scrap do.	2,010	4,640	1,840	4,280
Manganese:				
Ferromanganese (all grades) do.	18,000	14,800	11,000	9,470
Metal (including alloys, waste, and scrap) do.	3,840	9,400	4,870	10,200
Ore and concentrates do.	15,900	1,790	15,300	1,550
Silicomanganese do.	9,420	6,720	6,840	5,490
Mercury do.	389	1,230	316	885
Molybdenum (molybdenum content):				
Ferromolybdenum do.	224	2,960	479	5,200
Ore and concentrates do.	28,300	74,200	33,600	199,000
Oxides and hydroxides (gross weight) do.	1,040	5,610	2,240	13,700
Molybdates (all) do.	958	4,790 r/	1,800	10,000
Powder (gorss weight) do.	203 r/	3,760 r/	168	4,320
Unwrought (gross weight) do.	52	801	396	4,980
Wire (gross weight) do.	261 r/	10,200 r/	221	10,000
	94 r/	4,790	103	6,050
	94 1/	4,790	103	0,030
Nickel (nickel content):				
Alloyed (unwrought ingots, bars, rods, profiles, wire, sheets, strips, foil, tubes, pipes,	14.000	222.000 /	17.000	224 000
and other articles) do.	14,900	232,000 r/	17,000	226,000
Chemicals do.	1,440	59,000	2,110	67,800
Unwrought:				
Primary (cathodes, pellets, briquets, shot, ferronickel, powder, flakes, and				
metallurgical-grade oxide) do.	5,750	21,100	5,330	21,500
Secondary (scrap [stainless steel and waste]) do.	26,000	179,000 r/	34,500	235,000
Wrought (bars, rods, profiles, wire, sheets, strip, foil, tubes, and pipes)				
do.	551	5,760	427	5,920
Platinum-group metals [platinum, palladium, rhodium, iridium, osmium, ruthenium,				
radicali group inetars (platinari, paradram, modram, maram, osmiani, radicinari,				

${\it TABLE~8} \mbox{ --- Continued} \\ {\it U.S. EXPORTS OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS~1/} \\$

_	199		199	
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)
METALS Contin	ued	,		
Rare-earth metals (rare-earth oxide content):				
Cerium compounds do.	1,620,000	\$11,700	4,460,000	\$24,40
Compounds do.	1,090,000	14,100	2,420,000	12,50
Ferrocerium and pyrophoric alloys do.	4,810,000	20,400	3,400,000	12,000
Metals (including scandium and yttrium) do.	161,000	2,400	274,000	1,570
Selenium (metal, waste and scrap, selenium content) do.	261,000	2,200	246,000	2,28
Silicon:				
Ferrosilicon metric tons	39,500	36,800	38,000	36,300
Metal do.	10,600	133,000	12,100	140,00
Silver:				
Bullion (refined) kilograms	705,000	100,000	868,000	155,000
Doré and precipitates do.	103,000	16,000	99,100	17,50
Ores and concentrates do.	2,270	395	196	4
Waste and scrap do.	892,000	142,000	1,210,000	211,000
Tantalum:				
Ores and concentrates (includes synthetic) thousand kilograms	11	111	25	32
Unwrought (alloys, metal, powders, and waste and scrap) do.	242	24,900	200	21,10
Wrought do.	50	18,700	88	25,60
Thorium:				,
Compounds kilograms	189	68	7	1:
Ore (monazite concentrate) do.	W	W	33,000	21,100
Tin:	**	**	33,000	21,100
	2 600	11 400	2.560	12.000
Ingots and pigs metric tons	2,600	11,400	2,560	13,900
Tin scrap and other tin bearing material (except tinplate scrap, includes bars, rods,	02.600	62.200	60,000	52.00
profiles, wire, powders, flakes, tubes, and pipes) do.	92,600	63,200	68,000	52,800
Tinplate and terneplate do.	201,000	120,000	213,000	123,00
Titanium:				
Metal:				
Scrap do.	3,890	9,070	4,120	7,440
Sponge do.	104	748	126	738
Other unwrought (billet, blooms and sheet bars, ingots, etc.) do.	1,500	27,100	1,600	27,700
Wrought (bars, rods, etc.) do.	2,390	72,700	3,850	131,000
Ores and concentrates do.	15,200	4,890	19,000	6,070
Pigments (dioxides and oxides) do.	290,000	405,000	352,000	485,000
Tungsten (tungsten content):				
Ammonium paratungstate do.	166	2,210	250	2,200
Carbide powder do.	1,250	22,500	1,320	27,600
Metal and alloy powder do.	416	7,860	477	12,500
Miscellaneous tungsten-bearing materials (ferrotungsten and ferrosilicon	.10	7,000	.,,	12,00
tungsten, unwrought, wire [metal and alloy], wrought, other compounds [other				
tungstates], and other metal) do.	550	24,000	1,080	24,100
•		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Ore and concentrate do.	63	309	44	209
Vanadium:	0.55,000	10.000	4 020 000	12.00
Aluminum-vanadium master alloy kilograms	866,000 r/	10,800	1,030,000	12,900
Compounds (pentoxide [anhydride], and other [excludes vanadates], vanadium				
content) do.	1,020,000	5,260	1,390,000	7,870
Ferrovanadium do.	219,000 r/	2,780	374,000	4,410
Zinc:				
Basic materials (including waste and scrap) metric tons	XX	197,000	XX	224,00
Compounds (chloride, lithopone, oxide, sulfate, sulfide, and compounds n.s.p.f.)				
do.	17,300	50,400	25,300	31,10
Ore and concentrates (zinc content) do.	311,000	117,000	389,000	157,000
Rolled do.	6,600	6,400	6,680	4,760
Slab do.	1,410 r/	1,510	6,310	7,39
Zirconium:	-,/	7,4 - 4	-,	.,00
Ore and concentrates do.	35,900	13,200	32,000	13,900
Unwrought and waste and scrap do.	248	6,150 r/	223	6,570
Metal totals	XX	22,700,000 r/	XX	21,400,000
		44,700,000 I/	ΛΛ	21,400,00
INDUSTRIAL MINE	NALO			
Abrasive materials:				
Manufactured (Fused aluminum oxide, metallic abrasives, silicon carbide)		A.F.		
metric tons	57,100	59,000	60,900	60,20
Special silica do.	1,990	6,760	XX	8,600

${\bf TABLE~8 -- Continued} \\ {\bf U.S.~EXPORTS~OF~PRINCIPAL~MINERALS~AND~PRODUCTS,~EXCLUDING~MINERAL~FUELS~1/2} \\$

	199		199	
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)
INDUSTRIAL MINERALS -	- Continued			
Asbestos (includes reexports): Manufactured	XX	\$141,000	vv	\$177.00
	27,600	\$141,000 8,440	XX 17,500	\$177,000 6,550
	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	,
Barite (natural barium sulfate) do.	18,500	2,610	13,800	1,85
Boric acid thousand metric tons	75 r/	50.500	87	52.20
		50,500		53,30
Sodium borates do.	481	181,000	498	165,000
Bromine: Compounds (contained bromine) thousand kilograms	13,400	21,800	11,500	21,10
Elemental do.	6,010	7,440	6,470	7,27
Cement: Hydraulic and clinker thousand metric tons	625	47,800	(2/)	(2/
Clays:	023	47,000	(2/)	(27)
Ball do.	60	3,200	81	3,470
Bentonite do.	606	55,400	768	69,500
Fire do.	148	14,800	225	24,300
Fuller's earth do.	63	7,630	74	9,820
Kaolin thousand metric tons	2,980	488,000	3,180	532,000
Other (includes chamotte or dinas earth, activated clays and earths, and	2,980	400,000	3,160	332,000
· · · · · · · · · · · · · · · · · · ·	293	100,000	295	100,000
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	165	49,900	157	56,600
Diamonds (industrial):				
Industrial stones [incliding glazer's and engraver's unset, and miner's (natural and	1.040	4.000	4.400	00.60
synthetic)] thousand carats	1,040	4,980	4,400	89,600
Powder and grit (natural and synthetic) do.	105,000	137,000	153,000	143,000
Feldspar metric tons	17,700	1,840	17,300	1,940
Fluorspar do.	12,700	2,130	23,500	3,690
Garnet (abrasive) do.	11,400	XX	10,000	XX
Gemstones (includes reexports):	XX	1,630,000	XX	2,240,000
Graphite (nautral and artificial) metric tons	52,400	42,000	58,100	52,500
Gypsum:				
Boards thousand metric tons	91	24,600	74	19,800
Crude do.	69	3,640	89	4,090
Plasters do.	156	21,200	153	22,800
Other do.	XX	28,200	XX	26,700
Helium (Grade-A) million cubic meters	28	67,000	25	49,600
Iodine:				
Crude/resublimed metric tons	1,020	8,560	1,160	9,070
Potassium iodide do.	203	1,180	90	990
Iron oxide pigments:				
Pigment grade do.	22,400	32,000	21,300	30,700
Other grade do.	139,000	92,500	229,000	94,800
Lime thousand metric tons	69	7,830	74	7,800
Lithium compounds:				
Carbonate metric tons	6,260	22,200	5,260	18,100
Hydroxide do.	3,060	13,200	3,600	16,600
Magnesium compounds:				
Calcined dolomite do.	13,700	2,820	(2/)	(2/)
Caustic-calcined magnesia do.	4,450	2,460	3,240	1,780
Compounds (chlorides, hydroxide and peroxide, and sulfates)				
do.	9,890	7,930	20,900	10,400
Dead-burned and fused magnesia do.	59,800	21,800	59,800	22,800
Magnesite (crude) do.	7,390	3,010 r/	8,570	98′
Other magnesia do.	22,000	11,100	12,700	8,660
Mica:	,	,	,,	2,30
Scrap and flake:				
Powder do.	4,610	2,600	(2/)	(2/)
Waste do.	335	99	(2/)	(2/)
Sheet:	555	77	(21)	(27)
Unworked do.	292	511	(2/)	(2/)
Worked do.	617	9,020	(2/)	
Worked do. Nitrogen compounds (major):	017	9,020	(2/)	(2/
<u> </u>	460	NT A	261	NT.
Anhydrous ammonia thousand metric tons Eartilizer metariols do	460	NA NA	261	NA NA
Fertilizer materials do.	10,900	NA	13,400	NA 156 000
Industrial chemicals do.	149	119,000	169	156,000
Peat do.	8	900	23	2,20

 ${\it TABLE~8} \ \hbox{--} \ Continued \\ {\it U.S.} \ EXPORTS \ OF \ PRINCIPAL \ MINERALS \ AND \ PRODUCTS, EXCLUDING \ MINERAL \ FUELS \ 1/$

	1	993	19	1994		
Mineral		Quantity	Value (thousands)	Quantity	Value (thousands)	
INDUST	RIAL MINERALS	Continued				
Perlite (crude)	metric tons	26,000	\$1,000	30,000	\$900	
Phosphorus:						
Diammonium and monoammonium phosphates thous	and metric tons	8,460	NA	10,700	NA	
Elemental phosphorous	metric tons	18,400	32,200	15,200	26,400	
Phosphate rock:						
Ground and unground thous	and metric tons	3,570	NA	3,310	NA	
Phosphoric acid	do.	498	NA	516	NA	
Superphosphates	do.	762	NA	801	NA	
Potash:						
Potassium chloride (all grades)	metric tons	361,000	NA	419,000	NA	
Potassium magnesium sulfate	do.	333,000	NA	298,000	NA	
Potassium nitrate	metric tons	8,000	NA	6,510	NA	
Potassium sulfate	do.	223,000	NA	273,000	NA	
Pumice and pumicite thous	and metric tons	18	e/ 462	e/ 18	5,700	
Quartz crystal (cultured) thou	sand kilograms	24	2,260	38	6,110	
Salt thous	and metric tons	688	34,800	742	30,200	
Sand and gravel:						
Construction:						
Gravel	do.	534	5,000	482	4,640	
Sand	do.	597	10,600	564	15,600	
Industrial	do.	1,750	91,000	1,880	102,000	
Sodium compounds:						
	and metric tons	2,800	376,000	3,230	406,000	
Sodium sulfate	do.	89	8,540	65	7,020	
Stone:						
Crushed	metric tons	4,820,000	39,300	5,180,000	38,100	
Dimension thou	usand short tons	NA	57,900	NA	(2/)	
Strontium compounds (precipitated carbonate, oxide, hydroxide, and peroxide	(1)					
	kilograms	429	r/ 451	1,860	908	
Sulfur:						
Elemental thous	and metric tons	656	39,700	899	48,400	
Sulfuric acid (100% H2SO4)	metric tons	145,000	r/ 11,200	r/ 140,000	11,100	
Talc (excludes talcum in packages, face, and compact) thous	and metric tons	135	27,200	154	29,800	
Vermiculite	do.	7	e/ NA	7	e/ NA	
Industrial minerals totals		XX	4,300,000	r/ XX	5,060,000	
Total	=	XX	27,000,000		26,500,000	

r/ Revised. NA Not available. XX Not applicable.

^{1/} Data rounded by the U.S. Bureau of Mines to three significant digits.

^{2/} Data not available at time of table compilation.

^{3/}Artificial graphite includes large amounts of materials made from petroleum coke.

 ${\bf TABLE~9}$ U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS 1/

	199	93	1994		
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)	
METALS		(**************************************		(**************************************	
Aluminum:					
Aluminum oxide (alumina) thousand metric tons	3,940	\$754,000	3,120	\$623,000	
Crude and semicrude metric tons	2,540,000	3,260,000	3,380,000	5,000,000	
Manufactures do.	56,000	163,000	100,000	245,000	
Antimony:					
Metal do.	14,400	25,600	18,200	61,700	
Ore and concentrate (antimony content) do.	543	1,070	5,640	16,900	
Oxides (antimony content) do.	16,000	24,800	17,700	41,800	
Arsenic:					
Acid do.			5	10	
Metal do.	767	2,400	1,330	3,410	
Trioxide do.	27,500	15,900	26,800	15,200	
Bauxite:					
Calcined thousand metric tons	237	17,000	349	19,100	
Crude and dried do.	11,600	NA	10,700	NA	
Beryllium:					
Beryl metric tons	58	NA			
Metal and compounds kilograms	116,000	1,690	235,000	4,170	
Bismuth metals and alloys do.	1,330,000	6,250	1,660,000	9,650	
Cadmium:					
Metal do.	1,410,000	1,690	1,110,000	2,170	
Sulfide do.	10,800	143	43,500	272,000	
Chromium:					
Chemicals metric tons	15,500	21,700	20,600	29,300	
Chromite ore do.	255,000	16,500	201,000	13,900	
Ferrochromium (all grades) do.	387,000	184,000	317,000	148,000	
Metals and alloys [metal (waste and scrap and other), and ferrochromium-silicon]	,	,	2 - 1 , 0 0 0	- 10,000	
do.	14,900	44,100	21,600	47,100	
Pigments and preparations based chromium do.	4,980	12,700	6,400	16,400	
Cobalt:	.,,,,	12,700	0,.00	10,.00	
Metal (alloys, articles, matte, wrought, and waste and scrap)					
do.	752	16,900	1,040	20,800	
Metal (unwrought, excluding alloys and waste and scrap) do.	5,390	166,000	5,890	248,000	
Oxide and hydroxides do.	444	12,600	763	26,100	
Other forms (acetates, carbonates, chlorides, and sulfates) do.	842	7,320	1,250	12,100	
Columbium:	042	7,320	1,230	12,100	
Ferrocolumbium thousand kilograms	3,370	29,000	3,980	34,000	
Ores and concentrates do.	2,350	8,610	3,080	11,400	
Oxide do.	301	5,390	757	11,400	
	111		171	,	
	111	2,380	1/1	3,770	
Copper:	200,000	207.000	160,000	265,000	
Scrap (alloyed and unalloyed) metric tons	200,000	307,000	160,000	265,000	
Semimanufactures [pipes and tubing, plates, sheets, foil, bars, bare wire (including	70.000	267.000	04.100	200.000	
wire rod), wire and cable (stranded), and sulfate] do.	79,800	267,000	94,100	290,000	
Unmanufactured (ore and concentrates, matte, ash and precipitates, blister and	52 5 000	002.000	- 5 5.000	4 420 000	
anode, refined, unalloyed scrap) do.	526,000	993,000 r/	675,000	1,430,000	
Gallium (unwrought, waste and scrap) kilograms	15,600	4,130 r/	16,900	3,550	
Germanium materials do.	15,500	5,300	14,700	5,140	
Gold:					
Bullion (refined) do.	130,000	1,500,000	96,400	1,180,000	
Doré and precipitates do.	12,500	135,000	15,100	174,000	
Ore and concentrates do.	1,240	13,500	2,250	27,300	
Waste and scrap do.	25,500	65,400	21,800	111,000	
Hafnium (unwrought, and waste and scrap) metric tons	3	669	5	871	
Indium (unwrought, and waste and scrap) kilograms	73,400	11,500	70,200	8,950	
Iron ore thousand metric tons	14,100	419,000 r/	17,500	499,000	
Iron and steel:					
Ferroalloys not elsewhere listed:					
Ferrophosphorus do.	9,970	2,330	15,200	5,170	
Ferrotitanium and ferrosilicon-titanium do.	45,400	8,070	6,340	11,200	
Ferrozirconium do.	267	506	60	108	
See footnotes at end of table.	207	500	- 00	100	

 ${\it TABLE~9} -- Continued \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~PRINCIPAL~MINERALS~AND~PRODUCTS, EXCLUDING~MINERAL~FUELS~1/2}$

	1	.993	199	94
Mineral	Quantity	Value	Quantity	Value
		(thousands)		(thousands)
METALS Contin	nued			
Iron and steel: Continued				
Ferroalloys not elsewhere listed: Continued	4 5 500	424.000	22.400	420 500
Ferroalloys (n.e.c.) thousand metric tons	16,500	\$34,900	22,400	\$30,600
Products:				
Cast iron and steel do.	228	217,000	272	259,000
Fabricated steel do.	2,050	3,760,000	2,360	3,840,000
Steel mill do.	17,700	8,630,000	27,300	12,400,000
Pig iron do.	828	117,000	2,440	342,000
Scrap:				
Direct-reduced iron (steelmaking grade) do.	1,090	104,000	1,170	138,000
Heavy melting, bundles, shredded steel, borings, shovelings, and turnings, cut				
plate and structural, tinned (iron or steel), remelting ingots, stainless steel, other				
steel (alloys, tinplate and template) do.	1,390	· · · · · · · · · · · · · · · · · · ·	1,710	215,000
Ships, boats, and other vessels for scrapping do.	(2/)	82	(2/)	210
Used rails for rerolling and other uses do.	70	13,600	183	31,500
Stainless steel (bars, pipe, plate, semifinished, shapes, sheet, strip, tube, wire and				
wire rods) metric tons	611,000	NA	(3/)	NA
Lead:				
Base bullion (lead content) do.	18	62	577	284
Ore and concentrates (lead content) do.	483	347	473	138
Pigments and compounds do.	30,900	33,600	36,700	43,600
Pigs and bars (lead content) do.	196,000	85,100	231,000	134,000
Scrap (reclaimed,includes ash and residues, lead content) do.	78	r/ 39	144	80
Wrought (all forms, including wire and powders, gross weight)				
do.	6,890	10,300	5,820	12,100
Magnesium:				
Alloys (magnesium content) do.	8,080	27,500	9,540	33,800
Metal do.	24,200	53,100	15,700	36,200
Powder, sheets, tubing, ribbons, wire, and other forms (magnesium content)	,	,	· ·	,
do.	1,470	4,620	981	3,510
Waste and scrap do.	3,460	4,520	2,920	4,190
Manganese:	-,	,-	,-	,
Chemicals (manganese dioxide and potassium permanganate)				
do.	25,400	38,200	31,300	47,200
Metal do.	15,100	22,500	20,300	28,800
Ore and concentrates (manganese content) do.	232,000	24,900 r/	331,000	29,800
Ferromanganese (all grades, manganese content) do.	542,000	335,000	530,000	338,000
Silicomanganese (manganese content) do.	208,000	133,000	181.000	123,000
Mercury (metal, mercury-bearing waste and scrap) do.	40	143	129	494
Molybdenum (molybdenum content):	40	143	12)	777
Ferromolybdenum do.	2,190	12,700	2,960	23,200
Molybdates (all) do.	317	2,630	362	*
		,		2,630
Ore and concentrates do.	3,400	17,000	2,280	15,900
Oxides and hydroxides (gross weight) do.	622	2,880	628	3,950
Powder do.	52	2,090	89	2,770
Unwrought do.	136	1,750	52	1,060
Wire (gross weight) do.	3	308	2	304
Wrought (gross weight) do.	49	3,430		
Other (inorganic compounds, orange, waste and scrap, and other, gross weight)	4 000		1 120	0.440
do.	1,080	r/ 5,550	1,420	9,410
Nickel (nickel content):				
Alloyed (unwrought ingots, bars, rods, profiles, wire, sheets, strip, foil, tubes, pipes,				
other articles) do.	7,050	80,800	7,680	81,900
Chemicals (catalysts and salts) do.	4,030	56,900	3,950	53,400
Ore do.	2,970	W		
Unwrought:				
Primary (cathodes, pellets, briquets, shot, ferronickel, flakes, powder,				
metallurgical-grade oxide) do.	122,000	660,000	123,000	737,000
Secondary (scrap [stainless steel and waste]) do.	6,710	39,300	6,060	41,900
Wrought (bars, rods, profiles, wire, sheets, strips, foil, tubes, and pipes)				
do.	991	15,400	634	8,740
See footnotes at end of table.		-,		-,,

 ${\it TABLE~9} \ \hbox{--} Continued \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~PRINCIPAL~MINERALS~AND~PRODUCTS,~EXCLUDING~MINERAL~FUELS~} \ 1/$

	199	3	1994		
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)	
METALS Continue Platinum-group metals [platinum, palladium, rhodium, iridium, osmium, ruthenium,	ed				
(ores and concentrates, waste and scrap, and refined)] kilograms	153,000	\$1,310,000	171,000	\$1,400,000	
Rare-earth metals (rare-earth oxide content):	133,000	\$1,310,000	171,000	\$1,400,000	
Cerium compounds (including chlorides, hydroxides, nitrates, oxides, oxilate, and					
sulfates) do.	1,270,000	10,000	1,890,000	15,400	
Compounds (including hydroxides, nitrates, oxides, and others, except chlorides)	1,270,000	10,000	1,870,000	13,400	
do.	4,980,000	39,400	5,140,000	44,400	
Chloride mixtures (except cerium chloride) do.	2,360,000	8,090	2,410,000	11,400	
Ferrocerium and other pyrophoric alloys do.	118,000	1,650	77,400	1,170	
Oxide mixtures (except cerium oxides) do.	249,000	10,600	354,000	10,300	
Rare-earth metals (whether intermixed or alloyed) do.	196,000	2,640	284,000	4,450	
Rhenium:	1,0,000	2,0.0	20.,000	.,	
Ammonium perrhenate do.	3,170	1,600	2,330	1,010	
Metal do.	2,700	3,330	5,870	5,890	
Selenium: (selenium content)	2,700	3,330	3,070	3,070	
Selenium dioxide do.	14,500	143 r/	15,300	173	
Unwrought, and waste and scrap do.	367,000	6,880	396,000	7,420	
Silicon:	20.,000	0,000	2,0,000	7,120	
Ferrosilicon metric tons	200,000 r/	111,000	204,000	125,000	
Metal do.	72,200	126,000	100,000	152,000	
Silver:	72,200	120,000	100,000	132,000	
Bullion (refined) kilograms	2.180.000	297,000	2,060,000	347,000	
Doré and precipitates do.	281,000	78,600	413,000	124,000	
Ore and concentrates do.	35,700	6,410	133,000	24,100	
Waste and scrap do.	1,270,000	46,000	1,070,000	55,100	
Tantalum:	1,270,000	40,000	1,070,000	33,100	
Ores and concentrates (includes synthetic) thousand kilograms	1,290	32,700	1,120	25,600	
Unwrought (alloys, metal, powders, and waste and scrap) do.	165	14,800	340	26,100	
Wrought do.	3	547	1	368	
Tellurium (unwrought, and waste and scrap) kilograms	45,000	3,180	27,400	1,570	
Thallium (unwrought waste and scrap) do.	273	35	(3/)	(3/)	
Thorium:	213	33	(3/)	(3/)	
Compounds do.	18,300	479	3,150	140	
Tin:	10,500	477	3,130	140	
Compounds metric tons	431	3,150	744	4,740	
Metal (unwrought) do.	33,700	176,000 r/	32,400	171,000	
Miscellaneous tin and tin manufactures (alloys [n.s.p.f.], dross, flitters, foil,	33,700	170,000 17	32,100	171,000	
metallics, powder, residues, scrap, skimmings, and manufactures [n.s.p.f.])					
do.	XX	30,300	XX	42.100	
Tinplate and terneplate do.	237,000	161,000	337,000	216,000	
Tinplate scrap do.	12,600	1,420	8,950	1,410	
Titanium:	12,000	1,420	0,750	1,410	
Concentrates:					
Ilmenite do.	301,000	18,400	336,000	26,200	
Rutile (natural and synthetic) do.	371,000	135,000	332,000	124,000	
Titaniferous iron ore do.	66,300	2,850	43,700	2,270	
Titanium slag do.	476,000	150,000	472,000	158,000	
Metal:	770,000	150,000	7,2,000	130,000	
Ingots and billets do.	272	3,030	1,730	15,500	
Powder do.	37	3,030 813	(3/)	(3/)	
Unwrought do.	2,160	10,500	6,470	22,500	
Waste and scrap do.	5,520	18,100	5,870	19,100	
Wrought (bars, castings, foil, pipes, plates, profiles, rods, sheet, strip, tubes, wire,	3,340	10,100	3,070	19,100	
	600	17 200	901	22 700	
and other) do. Other (includes bars, blooms, sheet, slabs, and other unwrought)	600	17,200	801	23,700	
	121	761	611	4,340	
Digments (disvides and oxides)	131	761 284 000	644		
Pigments (dioxides and oxides) do. Truggton (truggton gentant)	172,000	284,000	176,000	283,000	
Tungsten (tungsten content):	1 100	6 400	040	£ 220	
Ammonium paratungstate do.	1,180	6,480	848	5,220	
Ferrotungsten do.	652	2,830	515	1,880	

TABLE 9 -- Continued U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS 1/

	1993		1994	
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)
METALS Continued	1			
Tungsten (tungsten content): Continued				
Miscellaneous tungsten-bearing materials (carbide, chlorides, oxides, unwrought,				
tungstates [calcium and sodium], waste and scrap, wrought, and other	2.060	\$42,300	6.410	\$48,400
tungsten-bearing material) metric tons Ore and concentrates do.	3,960 1,720	542,300 7,840	6,410 2,960	\$48,400 9,110
Vanadium:	1,720	7,040	2,900	9,110
Aluminum-vanadium master alloy (vanadium content) kilograms	1,630,000	12,200	1,910,000	12,900
Metal (including waste and scrap) do.	630,000	5,520	570,000	5,880
Pentoxide (anhydride, vanadium content) do.	69,800	381	294,000	1,770
Other oxides and hydroxides do.	18,700	292	3,470	41
Vanadium-bearing materials (ash, residues, slag, other [includes spent catalyst],	,		-,	
pentoxide content) do.	2,590,000	3,320	3,390,000	2,070
Miscellaneous chemicals (vanadates, hydrides, and nitrides) do.	66,800	749	29,700	454
Zinc:	,		. ,	
Pigments and compunds (chloride, lithopone, oxide, sulfate, sulfide, and				
compounds n.s.p.f.) metric tons	48,600	53,200	55,100	59,700
Ore and concentrates (zinc content) do.	33,100	11,800	27,400	10,500
Rolled do.	135	353	475	744
Slab do.	724,000	502,000	793,000	518,000
Zirconium:				
Ore and concentrates do.	70,000	9,320	82,000	14,900
Unwrought and waste and scrap do.	121	1,170 r/	188	1,110
Metal totals	XX	27,000,000 r/	XX	34,200,000
INDUSTRIAL MINERA	LS			
Abrasive materials:				
Manufactured (Fused aluminum oxide, metallic abrasives, silicon carbide)				
metric tons	299,000	149,000	153,000	143,000
Silica stone do.	XX	2,390	XX	2,400
Asbestos (unmanufactured) do.	30,800	6,960	25,800	5,390
Barite:				
Barium chemicals do.	30,300	24,500	39,300	29,400
Crude and ground do.	804,000	34,200	1,080,000	47,200
Boron (contained boric oxide):				
Borax thousand metric tons	40	1,230	9	2,700
Boric acid do.	17	11,900	20	12,900
Colemanite do.	90	48,600	87	10,800
Ulexite do.	149	40,700	120	24,000
Bromine:				
Compounds (contained bromine) thousand kilograms	18,400	47,800	15,700	55,300
Elemental do.	850	513	319	194
Cement: Hydraulic and clinker thousand metric tons	7,060	331,000	(3/)	(3/)
Clays:				
Ball and common blue clay do.	687	228	836	281
Bentonite do.	1,990	664	2,050	782
Fire do.	1,100	282	1,030	464
Fuller's earth and decolorizing earths do.	101	29	1,440	65
Kaolin (China clay) do.	7,620	3,460	10,800	4,030
Other (chamotte or dina's earth, artifically activated clay and activated earth)				
do.	27,900	12,900	19,400	9,260
Diatomite metric tons	1,880	338	379	363
Diamonds (industrial):				
Industrial stones [incliding glazer's and engraver's unset, and miner's (natural and	5.000	25 500	2.010	26.400
synthetic)] thousand carats	5,200	35,700	2,810	26,400
Powder, dust and grit (natural and synthetic) do.	133,000	81,100	174,000	89,300
Feldspar do.	7,050	514	7,360	513
Fluorspar:	20.400	21 100	22.700	22.700
Aluminum fluoride do.	39,400	31,100	23,700	22,700
Cryolite do.	3,780	3,070	4,450	3,460
Fluorspar do.	497,000 r/	46,900 r/	492,000	46,700
	60.000	60,000	60.000	CO 000
Hydrofluoric acid do. Garnet (abrasive) do.	62,900 12,200	60,000 XX	68,200 6,000	63,000 XX

TABLE 9 -- Continued $U.S. \ IMPORTS \ FOR \ CONSUMPTION \ OF \ PRINCIPAL \ MINERALS \ AND \ PRODUCTS, EXCLUDING \ MINERAL \ FUELS \ 1/NO \ AND \ PRODUCTS \ AND$

Mineral	19	1993		1994	
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)	
INDUSTRIAL MINERAL					
Gemstones (exports and reexports)	XX	\$5,850,000	XX	\$6,440,000	
Graphite:		20.000	52.100	2 - 000	
Natural metric tons	- ′	29,900	53,100	26,900	
Electric furnace electrodes do	<u>.</u> 34,000	57,800	45,700	95,000	
Gypsum:	-	16.200	270	20.700	
Boards thousand metric ton:	_	16,200	370	39,700	
Crude do	- 1	58,200 1,670	8,470	61,400	
Plasters do Other do	_	,	5 XX	960	
Iodine:		34,900	ΛΛ	39,300	
Crude metric ton:	3,500	27,700	4,260	32,400	
	-	27,700 997	134		
	114	997	134	1,160	
Iron oxide pigments:	- 4.940	1 200	6.420	2 1 40	
Natural do	- '	1,380	6,420	2,140	
Synthetic do	- '	55,900	45,000	59,300	
Kyanite (andalucite) do	- ′	2,130	7,900	1,290	
Lime thousand metric ton:	<u>s</u> 201	13,300	204	13,100	
Lithium: Carbonate metric ton:	4.200	12 100	4.500	10.700	
	- ′	12,100	4,500	12,700	
Hydroxide do	_ 24	238	29	330	
Magnesium compounds:	25.000	4.420	(2.5)	(2.0	
Calcined dolomite do	- ′	4,430	(3/)	(3/)	
Caustic-calcined magnesia do	- ′	15,700	125,000	16,100	
Compounds (chlorides, hydroxide, peroxide, and sulfates) do	- ′	6,140	55,500	13,700	
Dead-burned and fused magnesia do	- '	48,700	342,000	51,800	
Magnesite (crude) do	-	251	326	133	
Other magnesia do	51,200	6,270	7,890	8,500	
Mica:	-				
Scrap and flake:	- 12.100	0.070	(2.5	(2.0	
Powder do	- ′	8,070	(3/)	(3/)	
Waste do	4,770	1,310	(3/)	(3/)	
Sheet:	- 2000	2.520	(2.5	(2.0	
Unworked do	- ′	2,520	(3/)	(3/)	
Worked do	_	9,340	(3/)	(3/)	
Nepheline syenite (crushed and ground) do	289,000	15,400	333,000	18,700	
Nitrogen compounds:	2 220	415.000	4.200	725 000	
Anhydrous ammonia thousand metric tons	-	415,000	4,200	725,000	
Fertilizer materials do	-	1,090,000	9,730	1,480,000	
Industrial chemicals do	-	48,800	54	57,300	
Peat moss (poultry and fertilizer grade) do	- '	118,000	669,000	126,000	
Perlite (crude) metric tons	- ′	2,000	70,000	2,100	
Phosphate rock and phosphatic materials thousand metric tons	632	56,000	874	72,300	
Potash:		5 40.000	5 5 00 000	51.1.000	
Potassium chloride metric tons	-	549,000	7,790,000	614,000	
Potassium nitrate do	-	7,830	16,400	4,280	
Potassium sodium nitrate mixtures do	-	5,970	45,700	6,180	
Potassium sulfate do	87,300	15,400	70,900	17,300	
Pumice:	-				
Crude or unmanufactured thousand metric tons	_	6,430	142	12,000	
Wholly or partially manufactured do	-	635	1	591	
Salt do	5,870	100,000	9,630	151,000	
Sand and gravel:	-				
Construction do	-	15,400	1,500	14,800	
Industrial do	<u>.</u> 44	2,440	22	1,790	
Sodium compounds:					
Soda ash do	-	17,100	79	12,100	
Sodium sulfate do	<u>.</u> 163	13,600	190	15,700	
Stone:	-				
Crushed and calcium carbonate fines thousand metric tons	s 8,440 r	/ 74,300	8,940	77,900	
Dimension	NA	398,000	NA	(3/)	

 ${\it TABLE~9 -- Continued}\\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~PRINCIPAL~MINERALS~AND~PRODUCTS,~EXCLUDING~MINERAL~FUELS~1/2}}$

Mineral	1993	3	1994		
Mineral	Quantity	Value	Quantity	Value	
		(thousands)		(thousands)	
INDUSTRIAL MINERALS	Continued			_	
Strontium:					
Celestite (strontium sulfate) metric tons	26,400	\$1,930	35,500	\$2,420	
Compounds (carbonate and nitrate) do.	26,300	15,800	33,200	20,000	
Sulfur:					
Elemental thousand metric tons	2,070 r/	49,800 r/	1,650	62,000	
Sulfuric acid (100% H2SO4) metric tons	2,440,000 r/	70,700 r/	2,130,000	85,100	
Talc (unmanufactured) do.	99,800	10,800	155,000	14,900	
Vermiculite thousand metric tons	30 /e	NA	30 /e	NA	
Industrial mineral totals	XX	10,300,000 r/	XX	11,100,000	
Total	XX	37,400,000 r/	XX	45,300,000	

r/Revised. NA Not available. XX Not applicable.

 ${\it TABLE~10} \\ {\it COMPARISON~OF~WORLD~AND~U.S.~PRODUCTION~OF~SELECTED~NONFUEL~MINERAL~COMMODITIES} \\$

(Metric tons unless otherwise specified)

		1993			1994		
Mineral	_	World	U.S.	U.S. percent	World	U.S.	U.S. percent
		production	production	of world	production	production	of world
		e/ 1/	•	production	e/ 1/	•	production
METALS, MINE BAS	IS			•			
Antimony 2/		86,300 r/	W	NA	108,000	W	NA
Arsenic trioxide		41,400 r/			43,000		
Bauxite 3/	thousand tons	108,000 r/	W	NA	107,000	W	NA
Beryl 4/		6,740 r/	4,940 5/	73	6,130	4,330 5/	71
Chromite	thousand tons	9,300 r/			9,600		
Cobalt 2/4/		20,600 r/			18,500		
Columbium-tantalum concentrate (gross v	weight) 6/	29,800 r/			36,500		
Copper 2/	thousand tons	9,430 r/	1,800	19	9,260	1,810	20
Gold 2/	kilograms	2,310,000 r/	331,000	14	2,290,000	326,000	14
Iron ore (gross weight)	thousand tons	983,000 r/	55,700 r/	6	995,000	58,400	6
Lead 2/	do.	2,830 r/	362	13 r/	2,800	370	13
Manganese ore (gross weight)	do.	21,200 r/			20,900		
Mercury		2,290 r/	W	NA	1,760	W	NA
Molybdenum 2/		93,600 r/	36,800	39	104,000	46,800	45
Nickel 2/		899,000	2,460 5/	(7/)	NA	NA	NA
Platinum-group metals	kilograms	275,000 r/	8,300 e/	3	250,000	8,400 e/	3
Silver 2/		14,300 r/	1,640 r/	12 r/	13,900	1,480	11
Tin 2/		187,000 r/	W	NA	183,000		
Titanium concentrates (gross weight):							
Ilmenite (including leucoxene)	thousand tons	3,580	W	NA	NA	NA	NA
Rutile	do.	464	W	NA	NA	NA	NA
Tungsten 2/		32,000 r/	W	NA	25,500	W	NA
Vanadium 2/		33,400 r/	2,870	9 r/	33,900	2,740	8
Zinc 2/	thousand tons	6,960 r/	513	7	6,810	598	9
METALS, REFINERY B.	ASIS						
Aluminum	do.	19,700 r/	3,700	19	19,100	3,300	17
Bismuth		4,240 r/	W	NA	4,100	W	NA
Cadmium		18,900 r/	1,090	6	18,100	1,010	6
Cobalt		16,800 r/			18,500		
Copper (primary and secondary) 8/	thousand tons	11,500 r/	2,250	20	11,200	2,220	20
Lead (primary and secondary) 9/	do.	5,450 r/	1,230 r/	23	5,380	1,260	24
Magnesium (primary)		281,000 r/	132,000	47	267,000	128,000	48
Nickel 10/		807,000	4,880	1	NA	NA	NA
Selenium 6/11/	kilograms	1,760,000 r/	283,000	16 r/	1,880,000	360,000	19
Tellurium 4/	do.	89,100 r/	W	NA	93,600	W	NA
Tin 12/		194,000 r/	W	NA	199,000	W	NA
Zinc (primary and secondary)	thousand tons	7,400 r/	382	5	7,360	356	5
See footnotes at end of table.							

^{1/}Data rounded by the U.S. Bureau of Mines to three siginificant digits.

^{2/}Less than 1/2 unit.

 $^{3/\,\}text{Data}$ not available at time of table compilation.

TABLE 10 -- Continued COMPARISON OF WORLD AND U.S. PRODUCTION OF SELECTED NONFUEL MINERAL COMMODITIES

(Metric tons unless otherwise specified)

			1993			1994	
Mineral	-	World	U.S.	U.S. percent	World	U.S.	U.S. percent
		production	production	of world	production	production	of world
		e/ 1/		production	e/ 1/		production
METALSContinued							
IRON AND STEEL							
Direct-reduced iron	do.	23,800 r/	440	2	28,100	480	2
Iron, pig	do.	506,000 r/	48,200	10	512,000	49,400	10
Steel, raw	do.	728,000 r/	88,800	12	726,000	91,200	13
INDUSTRIAL MINERALS							
Asbestos	do.	2,650 r	14 13/	1 r/	2,410	10 13/	(7/)
Barite	do.	4,080 r/	315 13/	8 r/	4,470	758 13/	17
Boron minerals	do.	2,670 r/	1,060 13/	40 r/	2,850	1,110 13/	39
Bromine		396,000 r/	177,000 13/	45	412,000	195,000 13/	47
Cement, hydraulic 14/	thousand tons	1,300,000	72,400 e/	6	NA	NA	NA
Clays:							
Bentonite 4/	do.	7,550 r/	2,870 r/	38 r/	7,580	3,290	43
Fuller's earth 6/	do.	3,660 r/	2,450 13/	67 r/	3,820	2,640 13/	69
Kaolin 4/	do.	25,700 r/	8,830 r/13/	34 r/	30,400	8,320 13/	27
Diamond, natural	thousand carats	105,000 r/			111,000		
Diatomite	thousand tons	1,460 r/	599 13/	41	1,440	613 13/	43
Feldspar	do.	6,390 r/	770	12 r/	6,250	765	12
Fluorspar	do.	3,930 r/	60 e/ 5/	2 r/	3,850	49 e/ 5/	1
Graphite, natural		731,000 r/			719,000		
Gypsum	thousand tons	99,400 r/	15,800	16 r/	101,000	17,200	17
Iodine, crude		15,700 r/	1,940	12	14,800	1,430	10
Lime 14/	thousand tons	125,000 r/	16,800 r/13/	13 r/	118,000	17,400 13/	15
Magnesite, crude	do.	8,310 r/	W	NA	8,520	W	NA
Mica (including scrap and flake) 15/		196,000 r/	87,900	45 r/	214,000	109,000	51
Nitrogen: N content of ammonia	thousand tons	91,700 r/	12,600 r/ 16/	14	91,600	13,400 16/	15
Peat 17/	do.	144,000 r/	616	(7/)	139,000	547	(7/)
Perlite 4/		1,510,000 r/	569,000 13/	38 r/	1,580,000	644,000 13/	41
Phosphate rock (gross weight)	thousand tons	121,000 r/	35,500	29 r/	124,000	41,100	33
Potash (K2O equivalent)	do.	20,300 r/	1,510	7	22,500	1,400	6
Pumice 18/	do.	11,200 r/	469 13/	4	11,400	490 13/	4
Salt 14/	do.	181,000 r/	39,800 r/e/	22 r/	180,000	39,800 e/	22
Sand and gravel, industrial (silica) 4/	do.	107,000 r/	26,200 13/	25 r/	111,000	27,900 13/	25
Sodium compounds, n.e.s. (natural and namu	factured):				·	·	
Soda ash 19/	do.	30,500 r/	8,960	29	30,400	9,320	31
Sulfate	do.	4,000 r/	537 r/	13 r/	3,860	463	12
Strontium 4/		156,000 r/			150,000		
Sulfur, all forms	thousand tons		11,000	22 r/	51,000	11,500	23
Talc and pyrophyllite 20/	do.	8,340 r/	968	12 r/	7,880	935	12
Vermiculite		494,000 r/	190,000 13/	38 r/	486,000	177.000 13/	37

- e/ Estimated. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data.
- 1/ The world production totals on commodities for which U.S. data are withheld exclude U.S. production; therefore percent of world production cannot be reported.
- 2/ Content of ore and concentrate.
- 3/ U.S. figures represent dried bauxite equivalent of crude ore; to the extent possible, individual country figures that are included in the world total are also on the dried bauxite basis, but for some countries available data are insufficent to permit this adjustment.
- 4/ World total does not include an estimate for output in China.
- 5/ Shipments.
- 6/ World total does not include estimates for output in the former U.S.S.R. or China.
- 7/ Less than 1/2 unit.
- 8/ Includes total production of refined copper, whether produced by pyrometallurgical or electrolytic refining methods and whether derived from primary unrefined copper or from scrap. Copper cathode derived from electrowinning processing is also included.
- 9/ Includes bullion.
- 10/ Refined nickel plus nickel content of ferronickel, nickel oxide, and other nickel salts.
- 11/ U.S. production includes semi-refined selenium exported for further refining.
- 12/ Includes tin content of alloys made directly from ore.
- 13/ Quantity sold or used by producers.
- $14/\,Data$ for the United States include Puerto Rico.
- 15/ Excludes U.S. production of low-quality sericite and sheet mica, if any.
- 16/ Synthetic anhydrous ammonia; excludes coke oven byproduct ammonia.
- 17/ Data for the United States exclude proprietary amounts of fuel peat.
- 18/ World total does not include an estimate for output in the former U.S.S.R.
- 19/ U.S. production is natural only.
- 20/ Data for the United States exclude proprietary pyrophyllite production.