



# 2007 Minerals Yearbook

---

STATISTICAL SUMMARY [ADVANCE RELEASE]

---

# STATISTICAL SUMMARY

By Joseph M. Krisanda

**The world production table was prepared by Glenn J. Wallace, international data coordinator.**

This annual report summarizes data on crude nonfuel mineral production<sup>1</sup> for the United States, its island possessions, and the Commonwealth of Puerto Rico.

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 copper, gold,

---

<sup>1</sup>The terms “nonfuel mineral production” and related “values” encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 2007 U.S. Geological Survey (USGS) mineral production data published in this chapter are as of January 2010. For some mineral commodities, such as construction sand and gravel, crushed stone, and portland cement, estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Specialist contact information are available on the Internet at <http://minerals.usgs.gov/minerals/contacts/comdir.html>; alternatively, specialists’ names and telephone numbers may be obtained by calling USGS information at (703) 648-4000 or by calling the USGS Earth Science Information Center at 1-888-ASK-USGS (275-8747). All Mineral Industry Surveys—mineral commodity, State, and country—are also available on the Internet at <http://minerals.usgs.gov/minerals>.

lead, silver, and zinc, the quantities listed are recorded on a mine basis (as the recoverable content of ore sold or treated). The values assigned to the quantities, however, are based on the average selling price of refined metal, not the mine value.

The total value of all nonfuel mineral production in the United States in 2007 increased to \$69.6 billion, which was an increase of 4% compared with that of 2006; metals increased to \$25.4 billion, which was an increase of 9%; and industrial minerals increased to \$44.2 billion, an increase of 2%.

In 2007, the value of nonfuel mineral commodity production for the following 13 commodities, in descending order of production value, was greater than \$1 billion: stone (crushed), cement (portland), sand and gravel (construction), copper, gold, molybdenum concentrates, iron ore (usable shipped), zinc, lime, salt, phosphate rock (marketable), soda ash, and lead. They accounted for 89% of the U.S. total production value (table 1).

In 2007, the value of nonfuel mineral commodity production in the following 23 States, in descending order of production value, was greater than \$1 billion: Arizona, Nevada, California, Utah, Alaska, Florida, Texas, Minnesota, Missouri, Georgia, Colorado, Michigan, Pennsylvania, Wyoming, New Mexico, New York, Montana, Alabama, Ohio, Illinois, North Carolina, Virginia, and Kansas. They accounted for 82% of the U.S. total production value (table 3).

TABLE 1  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007		
	Quantity	Value	Quantity	Value	Quantity	Value	
<b>Metals:</b>							
Beryllium concentrates <sup>4</sup>	metric tons	2,780	NA	3,830	NA	3,810	NA
Copper <sup>5</sup>		1,140	4,360,000	1,200	8,310,000	1,170	8,450,000
Gold <sup>5</sup>	kilograms	256,000	3,670,000	252,000	4,910,000	238,000	5,350,000
Iron ore, usable shipped		53,200	2,370,000	52,700	2,840,000	50,900	3,040,000
Lead <sup>5</sup>	metric tons	426,000	574,000	419,000	715,000	434,000	1,180,000
Molybdenum concentrates <sup>6</sup>	do.	58,000	3,660,000	59,800 <sup>r</sup>	3,040,000	57,000	3,530,000
Palladium <sup>5</sup>	kilograms	13,300	87,100	14,400	150,000	12,800	148,000
Platinum <sup>5</sup>	do.	3,920	113,000	4,290	158,000	3,860	162,000
Silver <sup>5</sup>	do.	1,230,000	289,000	1,160,000 <sup>r</sup>	431,000 <sup>r</sup>	1,280,000	554,000
Zinc <sup>5</sup>	metric tons	720,000	1,070,000	699,000	2,450,000	769,000	2,620,000
Combined values of cadmium (byproduct from zinc concentrates), iron oxide pigments (crude), magnesium metal, titanium concentrates, tungsten (2007), zirconium concentrates							
		XX	317,000	XX	297,000 <sup>r</sup>	XX	332,000
Total		XX	16,500,000	XX	23,300,000	XX	25,400,000
<b>Industrial minerals, excluding fuels:<sup>7</sup></b>							
Barite		489	17,600	589	23,500	455	20,600
Boron		1,150	713,000	(8)	W	(8)	W
Bromine	metric tons	226,000	168,000	243,000	339,000	(8)	W
<b>Cement:<sup>9</sup></b>							
Masonry		5,420	679,000 <sup>e</sup>	5,400	743,000 <sup>e</sup>	4,320	614,000 <sup>e</sup>
Portland		93,900	8,360,000 <sup>e</sup>	92,800	9,230,000 <sup>e</sup>	91,100	9,230,000 <sup>e</sup>
<b>Clays:</b>							
Ball		1,210	52,900	1,190	53,100 <sup>r</sup>	1,070	49,000
Bentonite		4,710	215,000	4,940	236,000 <sup>r</sup>	4,820	252,000
Common		24,300	176,000	24,200	243,000	20,600	216,000
Fire		353	10,700	848	19,000	565	23,800
Fuller's earth		2,730	275,000	2,540	243,000	2,660	257,000
Kaolin		7,800	860,000	7,470	981,000 <sup>r</sup>	7,110	959,000
Diatomite		653	179,000	799	176,000	687	163,000
Feldspar <sup>9</sup>		750 <sup>10</sup>	42,700 <sup>r</sup>	760 <sup>10</sup>	44,600 <sup>r</sup>	730 <sup>10</sup>	43,800
Garnet, industrial <sup>9</sup>	metric tons	40,100	3,840	34,100	4,230	61,400	11,300
Gemstones, natural <sup>9</sup>		NA	13,400	NA	11,300	NA	11,900
Gypsum, crude <sup>9</sup>		18,800 <sup>r</sup>	159,000 <sup>r</sup>	18,500 <sup>r</sup>	167,000 <sup>r</sup>	17,900	146,000
<b>Helium:</b>							
Crude	million cubic meters	42	63,300	41	66,000	40	68,900
Grade-A	do.	133	336,000	137 <sup>r</sup>	395,000	138	497,000
Iodine, crude <sup>9</sup>	metric tons	1,570	W	(8)	W	(8)	W
Kyanite <sup>e</sup>		90	13,400	90	14,000	90	19,000
Lime		20,000	1,500,000	21,000	1,700,000	20,200	1,760,000
Mica, crude	metric tons	78,100	19,300	110,000	22,400	96,600	14,400
Peat <sup>11</sup>		751	20,800	734	20,100	694	17,800
Perlite, crude	metric tons	508,000	20,700	454,000	19,500	409,000	18,500
Phosphate rock, marketable <sup>9</sup>		36,100	1,070,000	30,100	919,000	29,700	1,520,000
Potash, gross weight <sup>10</sup>		2,500	410,000	2,400	410,000	2,600	480,000
Pumice and pumicite	metric tons	1,270,000	39,300	1,540,000	44,300	1,270,000	28,900
Salt		45,000	1,310,000	40,600 <sup>r</sup>	1,310,000 <sup>r</sup>	45,400	1,520,000
<b>Sand and gravel:</b>							
Construction		1,280,000	7,490,000 <sup>r</sup>	1,320,000	8,530,000 <sup>r</sup>	1,230,000	8,640,000
Industrial		30,600	752,000	28,900 <sup>r</sup>	768,000 <sup>r</sup>	30,000	859,000
Silica stone <sup>12</sup>	metric tons	576	2,290	227	992	231	1,020
Soda ash <sup>9</sup>		11,000	968,000	11,000	1,170,000	11,100	1,260,000

See footnotes at end of table.

TABLE 1—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES<sup>1</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Industrial minerals, excluding fuels—Continued:						
Stone:						
Crushed <sup>13</sup>	1,700,000	12,400,000	1,770,000 <sup>r</sup>	14,200,000 <sup>r</sup>	1,600,000	13,900,000
Dimension	1,360	269,000	1,330	264,000	1,390	274,000
Talc, crude <sup>9</sup>	856	24,400	895	27,400	769	24,400
Tripoli <sup>9</sup> metric tons	91,100	18,700	76,000	18,200 <sup>r</sup>	96,400	17,400
Vermiculite, concentrate <sup>e</sup>	100	W	100	W	100	W
Combined values of brucite, greensand marl, lithium carbonate, magnesite, magnesium compounds, olivine, pyrophyllite (crude), staurolite, vermiculite, wollastonite, zeolites, and values indicated by symbol						
W	XX	262,000 <sup>r</sup>	XX	1,030,000 <sup>r</sup>	XX	1,340,000
Total	XX	38,900,000	XX	43,500,000 <sup>r</sup>	XX	44,200,000
Grand total	XX	55,400,000	XX	66,800,000 <sup>r</sup>	XX	69,600,000

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

<sup>1</sup>Table includes data available through January 26, 2010.

<sup>2</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>3</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>4</sup>Shipments.

<sup>5</sup>Recoverable content of ores, etc.

<sup>6</sup>Content of ore and concentrate.

<sup>7</sup>Sold or used unless otherwise specified.

<sup>8</sup>Withheld to avoid disclosing company proprietary data.

<sup>9</sup>Production.

<sup>10</sup>Data are rounded to no more than two significant digits.

<sup>11</sup>Excludes attapulgite.

<sup>12</sup>Includes grindstones, pulpstones, and sharpening stones; excludes mill liners and grinding pebbles.

<sup>13</sup>Excludes abrasive stone and bituminous limestone and sandstone; all included elsewhere in table.

TABLE 2  
NONFUEL MINERALS PRODUCED IN THE UNITED STATES, BY COMMODITY AND STATES IN 2007<sup>1</sup>

(Principal States based on quantity unless otherwise noted)

Mineral	Principal States	Other States (alphabetical order)
Barite	NV and GA	
Beryllium concentrates	UT	
Boron	CA	
Bromine	AR	
Brucite	TX and NV	
Cement:		
Masonry	FL, CA, SC, AL, IN	AR, AZ, CO, GA, IA, KS, KY, MD, ME, MI, MO, MT, NE, NM, NY, OH, OK, PA, TN, TX, VA, WV.
Portland	TX, CA, PA, FL, MI	All other States, except AK, CT, DE, HI, LA, MA, MN, NC, ND, NH, NJ, RI, VT, WI.
Clays:		
Ball	TN, TX, MS, KY, IN	
Bentonite	WY, MT, UT, AL, MS	AZ, CA, CO, NV, OR, TX.
Common	AL, TX, NC, GA, OH	All other States, except AK, DE, HI, ID, NH, NV, RI, VT, WI.
Fire	CA, MO, OH, SC	
Fuller's earth	GA, MO, MS, VA, FL	CA, IL, KS, NV, TN, TX.
Kaolin	GA, SC, AL, AR, NV	CA, FL, NC, TX.
Copper <sup>2</sup>	AZ, UT, NM, NV, MT	ID and MO.
Diatomite	CA, NV, OR, WA	
Feldspar	NC, VA, CA, OK, GA	ID and SD.
Garnet, industrial	MT, NY, ID	
Gemstones, natural <sup>3</sup>	TN, OR, AZ, CA, AR	All other States.
Gold <sup>2</sup>	NV, AK, UT, CO, MT	AZ, CA, ID, NM, SD.
Greensand marl	NJ	
Gypsum, crude	OK, IA, CA, NV, KS	AR, AZ, CO, IN, LA, MI, NM, NY, SD, TX, UT, WY.
Helium:		
Crude	KS and TX	
Grade-A	KS, WY, TX, OK, CO	NM and UT.
Iodine, crude	OK	
Iron ore, usable	MN, MI, SD, CA	
Iron oxide pigments, crude	GA and VA	
Kyanite	VA	
Lead <sup>2</sup>	MO, AK, ID, MT, WA	
Lime	MO, AL, KY, OH, TX	All other States, except AK, CT, DE, HI, KS, MD, ME, NC, NH, NJ, NY, RI, SC, VT.
Lithium carbonate	NV	
Magnesite	NV	
Magnesium compounds	MI, UT, FL, DE, CA	
Magnesium metal	UT	
Mica, crude	NC, SD, GA, SC, VA	
Molybdenum, concentrates	CO, UT, AZ, ID, MT	NM and NV.
Olivine	WA and NC	
Palladium <sup>2</sup>	MT	
Peat	FL, NY, MI, MN, IL	IA, IN, ME, NJ, OH, PA, WA, WI, WV.
Perlite, crude	NM, OR, AZ, CA, ID	NV.
Phosphate rock	FL, NC, ID, UT	
Platinum <sup>2</sup>	MT	
Potash	NM, UT, MI	
Pumice and pumicite	CA, AZ, NM, ID, OR	KS and NV.
Pyrophyllite, crude	NC	
Salt	LA, TX, NY, OH, KS	AL, AZ, CA, MI, NM, NV, OK, TN, TX, UT, VA.
Sand and gravel:		
Construction	CA, TX, AZ, MI, MN	All other States.
Industrial	IL, TX, WI, CA, MN	All other States, except AK, CT, DE, HI, KY, MA, MD, ME, MT, NE, NH, OR, SD, UT, VT, WY.
Silica stone <sup>4</sup>	AR	
Silver <sup>2</sup>	AK, NV, ID, UT, MT	AZ, CA, CO, MO, NM.
Soda ash	WY and CA	
Staurolite	FL	
Stone:		
Crushed	TX, PA, FL, MO, GA	All other States.
Dimension	WI, IN, VT, MA, GA	All other States, except AK, DE, FL, HI, IA, IL, KY, LA, MS, ND, NE, NJ, NV, OR, RI, WY.

See footnotes at end of table.

TABLE 2—Continued  
 NONFUEL MINERALS PRODUCED IN THE UNITED STATES, BY COMMODITY AND STATES IN 2007

(Principal States based upon quantity unless otherwise noted)

Mineral	Principal States	Other States (alphabetical order)
Talc, crude	MT, TX, VT, NY, CA	
Titanium concentrates:		
Ilmenite	VA and FL	
Rutile	FL	
Tripoli	IL, OK, AR, PA	
Tungsten	CA	
Vermiculite, crude	SC and VA	
Wollastonite	NY	
Zeolites	NM, TX, ID, NV, AZ	CA and WY.
Zinc <sup>2</sup>	AK, MO, WA, TN, NY	ID and MT.
Zirconium concentrates	FL and VA	

<sup>1</sup>Table includes data available through January 26, 2010.

<sup>2</sup>Content of ores, etc.

<sup>3</sup>Principal States based on value.

<sup>4</sup>Grindstones, pulpstones, and sharpening stones; excludes mill liners and grinding pebbles.

TABLE 3

VALUE OF NONFUEL MINERAL PRODUCTION IN THE UNITED STATES AND PRINCIPAL NONFUEL MINERALS PRODUCED IN 2007<sup>1,2</sup>

State	Value (thousands)	Rank	Percentage of U.S. total	Principal minerals, in order of value
Alabama	\$1,350,000	18	1.95	Cement (portland), stone (crushed), lime, sand and gravel (construction), cement (masonry).
Alaska	3,520,000	5	5.06	Zinc, gold, lead, silver, sand and gravel (construction).
Arizona	7,260,000	1	10.43	Copper, molybdenum concentrates, sand and gravel (construction), cement (portland), stone (crushed).
Arkansas	768,000	29	1.10	Bromine, stone (crushed), cement (portland), sand and gravel (construction), lime.
California	4,380,000	3	6.29	Sand and gravel (construction), cement (portland), boron minerals, stone (crushed), soda ash.
Colorado	2,040,000	11	2.93	Molybdenum concentrates, sand and gravel (construction), cement (portland), gold, stone (crushed).
Connecticut <sup>3</sup>	166,000	43	0.24	Stone (crushed), sand and gravel (construction), stone (dimension), clays (common), gemstones (natural).
Delaware <sup>3</sup>	24,700	50	0.04	Sand and gravel (construction), stone (crushed), magnesium compounds, gemstones (natural).
Florida	3,380,000	6	4.85	Phosphate rock, stone (crushed), cement (portland), sand and gravel (construction), cement (masonry).
Georgia	2,060,000	10	2.95	Clays (kaolin), stone (crushed), cement (portland), clays (fuller's earth), sand and gravel (construction).
Hawaii	150,000	44	0.22	Stone (crushed), sand and gravel (construction), gemstones (natural).
Idaho	779,000	28	1.12	Molybdenum (concentrates), sand and gravel (construction), phosphate rock, silver, lead.
Illinois	1,220,000	20	1.76	Stone (crushed), cement (portland), sand and gravel (construction), sand and gravel (industrial), lime.
Indiana	991,000	24	1.42	Stone (crushed), cement (portland), sand and gravel (construction), lime, cement (masonry).
Iowa	688,000	32	0.99	Stone (crushed), cement (portland), sand and gravel (construction), gypsum (crude), lime.
Kansas	1,070,000	23	1.53	Helium (Grade-A), cement (portland), stone (crushed), salt, helium (crude).
Kentucky	786,000	27	1.13	Stone (crushed), lime, cement (portland), sand and gravel (construction), clays (common).
Louisiana	567,000	34	0.81	Sand and gravel (construction), salt, stone (crushed), sand and gravel (industrial), clays (common).
Maine	188,000	42	0.27	Sand and gravel (construction), cement (portland), stone (crushed), stone (dimension), cement (masonry).
Maryland <sup>3</sup>	673,000	33	0.97	Stone (crushed), cement (portland), sand and gravel (construction), cement (masonry), stone (dimension).
Massachusetts <sup>3</sup>	277,000	38	0.40	Sand and gravel (construction), stone (crushed), lime, stone (dimension), clays (common).
Michigan	1,970,000	12	2.83	Iron ore (usable shipped), cement (portland), sand and gravel (construction), salt, stone (crushed).
Minnesota <sup>3</sup>	2,690,000	8	3.86	Iron ore (usable shipped), sand and gravel (construction), stone (crushed), sand and gravel (industrial), lime.
Mississippi	238,000	41	0.34	Sand and gravel (construction), stone (crushed), clays (fuller's earth), cement (portland), clays (ball).
Missouri	2,270,000	9	3.26	Stone (crushed), lead, cement (portland), lime, zinc.
Montana	1,360,000	17	1.96	Copper, molybdenum (concentrates), platinum metal, gold, palladium metal.
Nebraska <sup>3</sup>	147,000	45	0.21	Cement (portland), stone (crushed), sand and gravel (construction), lime, clays (common).
Nevada	5,390,000	2	7.75	Gold, copper, sand and gravel (construction), lime, stone (crushed).
New Hampshire <sup>3</sup>	118,000	46	0.17	Stone (crushed), sand and gravel (construction), stone (dimension), gemstones (natural).
New Jersey	342,000	37	0.49	Stone (crushed), sand and gravel (construction), sand and gravel (industrial), greensand marl, peat.
New Mexico	1,560,000	15	2.24	Copper, potash, sand and gravel (construction), molybdenum (concentrates), cement (portland).
New York	1,530,000	16	2.21	Stone (crushed), salt, sand and gravel (construction), cement (portland), zinc.
North Carolina	1,200,000	21	1.72	Stone (crushed), phosphate rock, sand and gravel (construction), sand and gravel (industrial), clays (common).
North Dakota <sup>3</sup>	50,300	49	0.07	Sand and gravel (construction), lime, stone (crushed), clays (common), sand and gravel (industrial).
Ohio	1,270,000	19	1.83	Stone (crushed), sand and gravel (construction), salt, lime, cement (portland).
Oklahoma	731,000	31	1.05	Stone (crushed), cement (portland), sand and gravel (construction), iodine, sand and gravel (industrial).
Oregon	493,000	36	0.71	Stone (crushed), sand and gravel (construction), cement (portland), diatomite, perlite (crude).
Pennsylvania <sup>3</sup>	1,840,000	13	2.64	Stone (crushed), cement (portland), sand and gravel (construction), lime, cement (masonry).
Rhode Island <sup>3</sup>	52,300	48	0.08	Sand and gravel (construction), stone (crushed), sand and gravel (industrial), gemstones (natural).
South Carolina <sup>3</sup>	789,000	26	1.13	Cement (portland), stone (crushed), cement (masonry), sand and gravel (construction), sand and gravel (industrial).
South Dakota	270,000	39	0.39	Cement (portland), sand and gravel (construction), stone (crushed), gold, stone (dimension).
Tennessee	975,000	25	1.40	Stone (crushed), cement (portland), zinc, sand and gravel (construction), sand and gravel (industrial).
Texas	3,240,000	7	4.66	Cement (portland), stone (crushed), sand and gravel (construction), salt, lime.
Utah	3,880,000	4	5.57	Copper, molybdenum (concentrates), gold, sand and gravel (construction), cement (portland).
Vermont <sup>3</sup>	102,000	47	0.15	Stone (crushed), sand and gravel (construction), stone (dimension), talc (crude), gemstones (natural).
Virginia	1,150,000	22	1.66	Stone (crushed), sand and gravel (construction), cement (portland), lime, zirconium (concentrates).
Washington	748,000	30	1.08	Sand and gravel (construction), stone (crushed), cement (portland), zinc, lime.
West Virginia	268,000	40	0.39	Stone (crushed), cement (portland), lime, sand and gravel (industrial), cement (masonry).
Wisconsin <sup>3</sup>	540,000	35	0.78	Sand and gravel (construction), stone (crushed), sand and gravel (industrial), lime, stone (dimension).
Wyoming	1,750,000	14	2.52	Soda ash, clays (bentonite), helium (Grade-A), sand and gravel (construction), cement (portland).
Undistributed	289,000	XX	0.42	
Total	69,600,000	XX	100.00	

XX Not applicable.

<sup>1</sup>Table includes data available through January 26, 2010.<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.<sup>3</sup>Partial total; excludes values that must be withheld to avoid disclosing company proprietary data which are included with "Undistributed."

TABLE 4  
 VALUE OF NONFUEL MINERAL PRODUCTION PER CAPITA AND PER SQUARE KILOMETER IN 2007 BY STATE<sup>1,2</sup>

State	Land area (square kilometers)	Population (thousands)	Total value (thousands)	Per capita		Per square kilometer	
				Dollars	Rank	Dollars	Rank
Alabama	131,000	4,630	1,350,000	\$293	14	\$10,300	20
Alaska	1,480,000	683	3,520,000	5,150	1	2,380	44
Arizona	294,000	6,340	7,260,000	1,150	6	24,700	2
Arkansas	135,000	2,840	768,000	271	15	5,690	29
California	404,000	36,600	4,380,000	120	34	10,800	18
Colorado	269,000	4,860	2,040,000	419	10	7,590	27
Connecticut	12,500	3,500	166,000 <sup>3</sup>	47	47	13,200	12
Delaware	5,060	865	24,700 <sup>3</sup>	29	50	4,890	34
Florida	140,000	18,300	3,380,000	185	21	24,200	3
Georgia	150,000	9,550	2,060,000	215	17	13,700	9
Hawaii	16,600	1,280	150,000	117	36	9,000	24
Idaho	214,000	1,500	779,000	519	8	3,630	42
Illinois	144,000	12,900	1,220,000	95	40	8,490	25
Indiana	92,900	6,350	991,000	156	25	10,700	19
Iowa	145,000	2,990	688,000	230	16	4,750	36
Kansas	212,000	2,780	1,070,000	384	12	5,030	31
Kentucky	103,000	4,240	786,000	185	20	7,640	26
Louisiana	113,000	4,290	567,000	132	32	5,030	32
Maine	79,900	1,320	188,000	142	29	2,350	45
Maryland	25,300	5,620	673,000 <sup>3</sup>	120	35	26,600	1
Massachusetts	20,300	6,450	277,000 <sup>3</sup>	43	48	13,600	10
Michigan	147,000	10,100	1,970,000	196	19	13,400	11
Minnesota	206,000	5,200	2,690,000 <sup>3</sup>	517	9	13,000	13
Mississippi	121,000	2,920	238,000	81	43	1,960	47
Missouri	178,000	5,880	2,270,000	385	11	12,700	14
Montana	377,000	958	1,360,000	1,420	5	3,610	43
Nebraska	199,000	1,780	147,000 <sup>3</sup>	83	42	737	49
Nevada	284,000	2,570	5,390,000	2,100	3	19,000	5
New Hampshire	23,200	1,320	118,000 <sup>3</sup>	89	41	5,070	30
New Jersey	19,200	8,690	342,000	39	49	17,800	7
New Mexico	314,000	1,970	1,560,000	793	7	4,970	33
New York	122,000	19,300	1,530,000	80	44	12,600	15
North Carolina	126,000	9,060	1,200,000	132	31	9,520	22
North Dakota	179,000	640	50,300 <sup>3</sup>	79	45	282	50
Ohio	106,000	11,500	1,270,000	111	38	12,000	16
Oklahoma	178,000	3,620	731,000	202	18	4,110	40
Oregon	249,000	3,750	493,000	132	33	1,980	46
Pennsylvania	116,000	12,400	1,840,000 <sup>3</sup>	148	27	15,900	8
Rhode Island	2,710	1,060	52,300 <sup>3</sup>	49	46	19,300	4
South Carolina	78,000	4,410	789,000 <sup>3</sup>	179	22	10,100	21
South Dakota	197,000	796	270,000	338	13	1,370	48
Tennessee	107,000	6,160	975,000	158	24	9,140	23
Texas	678,000	23,900	3,240,000	136	30	4,780	35
Utah	213,000	2,650	3,880,000	1,470	4	18,200	6
Vermont	24,000	621	102,000 <sup>3</sup>	164	23	4,250	39
Virginia	103,000	7,710	1,150,000	150	26	11,300	17
Washington	172,000	6,470	748,000	116	37	4,340	37
West Virginia	62,400	1,810	268,000	148	28	4,300	38
Wisconsin	141,000	5,600	540,000 <sup>3</sup>	96	39	3,840	41
Wyoming	251,000	523	1,750,000	3,360	2	6,980	28
Undistributed	XX	XX	289,190	XX	XX	XX	XX
Total or average	9,160,000 <sup>4</sup>	301,000 <sup>4</sup>	69,600,000	231	XX	7,600	XX

XX Not applicable.

<sup>1</sup>Table includes data available through January 26, 2010.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Partial total; excludes values that must be concealed to avoid disclosing company proprietary data. Concealed values included with "Undistributed."

<sup>4</sup>Excludes Washington, DC (which has no mineral production), with an area of 179 square kilometers and a population of 588,000.

Sources: U.S. Geological Survey and U.S. Census Bureau.



TABLE 5  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1, 2, 3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Alabama:</b>						
<b>Cement:</b>						
Masonry	475	54,800 <sup>e</sup>	526	66,500 <sup>e</sup>	450	59,300 <sup>e</sup>
Portland	5,120	421,000 <sup>e</sup>	5,200	468,000 <sup>e</sup>	5,060	486,000 <sup>e</sup>
<b>Clays:</b>						
Bentonite	109	W	(4)	W	(4)	W
Common	2,280	29,000	2,210	38,800	2,240	43,100
Gemstones, natural	NA	371	NA	398	NA	398
Lime	2,240	181,000	2,450	224,000	2,480	234,000
<b>Sand and gravel:</b>						
Construction	15,700	70,500	20,100	96,000	16,700	96,500
Industrial	710	11,200	474	18,700	459	9,810
<b>Stone:</b>						
Crushed	50,300	329,000	57,500 <sup>r</sup>	387,000 <sup>r</sup>	52,500	402,000
Dimension	(4)	W	4	3,630	(4)	W
Combined values of clays [fire (2006), kaolin], iron oxide pigments (crude), mica [crude (2005–06)], salt, and values indicated by symbol W	XX	30,500	XX	28,400 <sup>r</sup>	XX	24,300
<b>Total</b>	<b>XX</b>	<b>1,130,000</b>	<b>XX</b>	<b>1,330,000<sup>r</sup></b>	<b>XX</b>	<b>1,350,000</b>
<b>Alaska:</b>						
Gemstones, natural	NA	12	NA	13	NA	13
Sand and gravel, construction	15,100	80,600	9,140 <sup>r</sup>	53,900 <sup>r</sup>	10,000	56,000
Stone, crushed	2,430	16,000	2,180 <sup>r</sup>	22,400 <sup>r</sup>	1,620	18,000
Combined values of cadmium (byproduct from zinc concentrates), gold, lead, silver, zinc	XX	1,410,000	XX	2,940,000 <sup>r</sup>	XX	3,440,000
<b>Total</b>	<b>XX</b>	<b>1,500,000</b>	<b>XX</b>	<b>3,020,000<sup>r</sup></b>	<b>XX</b>	<b>3,520,000</b>
<b>Arizona:</b>						
Clays, bentonite	33	1,670	34	1,710	30	1,520
Copper <sup>5</sup>	690	2,640,000	712	4,950,000	731	5,290,000
Gemstones, natural	NA	1,370	NA	1,560	NA	1,950
Sand and gravel, construction	84,900	516,000	94,000	662,000	85,800	652,000
Stone, crushed	12,100 <sup>6</sup>	72,400 <sup>6</sup>	14,700 <sup>r</sup>	121,000 <sup>r</sup>	15,700	145,000
Combined values of cement, clays (common), gold, gypsum (crude), lime, molybdenum concentrates, perlite (crude), pumice and pumicite, salt, sand and gravel (industrial), silver, stone [crushed traprock (2005), dimension sandstone], zeolites	XX	1,120,000	XX	1,020,000	XX	1,170,000
<b>Total</b>	<b>XX</b>	<b>4,350,000</b>	<b>XX</b>	<b>6,750,000<sup>r</sup></b>	<b>XX</b>	<b>7,260,000</b>
<b>Arkansas:</b>						
Clays, common	1,210	1,900	1,140	2,550	1,120	3,760
Gemstones, natural	NA	711	NA	439	NA	601
Sand and gravel, construction	10,600	62,000	11,100	73,600	9,080	66,300
Silica stone <sup>7</sup> metric tons	576	2,290	227	992	231	1,020
Stone, crushed	37,200 <sup>6</sup>	229,000 <sup>6</sup>	36,800 <sup>r</sup>	250,000 <sup>r</sup>	32,300	232,000
Combined values of bromine, cement, clays (kaolin), gypsum (crude), lime, sand and gravel (industrial), stone [crushed slate (2005), dimension limestone and sandstone], tripoli	XX	301,000 <sup>r</sup>	XX	471,000 <sup>r</sup>	XX	464,000
<b>Total</b>	<b>XX</b>	<b>597,000</b>	<b>XX</b>	<b>799,000<sup>r</sup></b>	<b>XX</b>	<b>768,000</b>
<b>California:</b>						
Boron minerals	1,150	713,000	(4)	W	(4)	W
<b>Cement:</b>						
Masonry	694	80,600 <sup>e</sup>	698	89,500 <sup>e</sup>	522	68,900 <sup>e</sup>
Portland	11,600	1,130,000 <sup>e</sup>	10,900	1,190,000 <sup>e</sup>	10,800	1,180,000 <sup>e</sup>
<b>Clays:</b>						
Bentonite	20	2,200	24	2,510	29	3,090
Common	1,010	16,600	744	7,640	549	4,010
Gemstones, natural	NA	1,130	NA	1,040	NA	818

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>California—Continued:</b>						
Sand and gravel:						
Construction	163,000	1,440,000	153,000	1,520,000	134,000	1,450,000
Industrial	2,030	60,400	1,670	57,800	1,850	43,400
Silver <sup>5</sup> kilograms	269	63	(4)	W	(4)	W
Stone:						
Crushed	55,200	491,000	70,100 <sup>r</sup>	777,000 <sup>r</sup>	54,300	568,000
Dimension	41	10,200	40	10,000	39	12,300
Combined values of clays [fire (2006–07), fuller's earth, kaolin], diatomite, feldspar, gold, gypsum (crude), iron ore (usable shipped), lime, magnesium compounds, perlite (crude), pumice and pumicite, salt, soda ash, talc [crude (2006–07)], tungsten (2006–07), zeolites, and values indicated by symbol W	XX	338,000 <sup>r</sup>	XX	1,070,000	XX	1,050,000
Total	XX	4,290,000 <sup>r</sup>	XX	4,720,000 <sup>r</sup>	XX	4,380,000
<b>Colorado:</b>						
Clays, common	255	1,610	211	1,300	174	1,100
Gemstones, natural	NA	358	NA	261	NA	261
Lime	29	3,900	50	5,750	(4)	W
Sand and gravel, construction	44,700	280,000	48,000	327,000	46,100	364,000
Stone:						
Crushed	13,200	90,500	12,100	87,400 <sup>r</sup>	11,200	77,900
Dimension	18	2,400	18	2,400	(4)	W
Combined values of cement, clays (bentonite), gold, gypsum (crude), helium (Grade-A), molybdenum concentrates, sand and gravel (industrial), silver, and values indicated by symbol W	XX	1,380,000	XX	1,250,000	XX	1,590,000
Total	XX	1,750,000	XX	1,680,000	XX	2,040,000
<b>Connecticut:</b>						
Clays, common	89	(8)	85	(8)	36	(8)
Gemstones, natural	NA	6	NA	6	NA	6
Sand and gravel, construction	8,400	64,200	8,780	75,600	8,290	73,400
Stone:						
Crushed	10,500	96,600	10,800 <sup>r</sup>	99,000 <sup>r</sup>	9,440	92,400
Dimension	(4)	(8)	(4)	(8)	XX	(8)
Total	XX	161,000	XX	175,000 <sup>r</sup>	XX	166,000
<b>Delaware:</b>						
Gemstones, natural	NA	1	NA	1	NA	1
Magnesium compounds metric tons	(4)	(8)	(4)	(8)	(4)	(8)
Sand and gravel, construction	2,640	20,000	2,790	22,400	3,330	24,700
Stone, crushed	(4)	(8)	(4)	(8)	(4)	(8)
Total	XX	20,000	XX	22,400	XX	24,700
<b>Florida:</b>						
Cement:						
Masonry	902	129,000 <sup>e</sup>	900	146,000 <sup>e</sup>	524	86,100 <sup>e</sup>
Portland	5,730	519,000 <sup>e</sup>	5,880	602,000 <sup>e</sup>	5,510	557,000 <sup>e</sup>
Clays:						
Common	4	W	3	W	3	W
Fuller's earth	279	39,700	(4)	W	(4)	W
Kaolin	29	3,510	23	2,900	21	2,770
Gemstones, natural	NA	1	NA	1	NA	1
Lime	23	2,940	(4)	W	(4)	W
Peat	464	9,450	496	10,000	501	9,800
Sand and gravel:						
Construction	37,500	210,000	40,000	266,000	30,300	231,000
Industrial	715	9,410	500 <sup>r</sup>	8,050 <sup>r</sup>	441	8,110
Stone, crushed	116,000 <sup>6</sup>	1,010,000 <sup>6</sup>	134,000 <sup>r</sup>	1,400,000 <sup>r</sup>	95,700	1,120,000

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Florida—Continued:						
Combined values of magnesium compounds, phosphate rock, staurolite, stone [crushed sandstone (2005)], titanium concentrates, zirconium concentrates, and values indicated by symbol W	XX	971,000	XX	810,000 <sup>r</sup>	XX	1,360,000
Total	XX	2,910,000	XX	3,240,000 <sup>r</sup>	XX	3,380,000
Georgia:						
Clays:						
Common	1,530	8,730	1,510	9,150	1,350	8,110
Fuller's earth	874	82,600	747	64,300	756	67,700
Kaolin	7,190	825,000	6,920	945,000	6,570	924,000
Gemstones, natural	NA	9	NA	9	NA	9
Sand and gravel:						
Construction	11,100	68,300	10,700 <sup>r</sup>	69,000 <sup>r</sup>	10,200	63,800
Industrial	689	15,000	973	17,400	1,040	18,100
Stone:						
Crushed	80,700	631,000	89,000 <sup>r</sup>	802,000 <sup>r</sup>	79,200	811,000
Dimension	111	21,000	81	19,100	84	14,600
Combined values of barite, cement, feldspar, iron oxide pigments (crude), lime, mica (crude)	XX	115,000	XX	140,000	XX	148,000
Total	XX	1,770,000	XX	2,070,000 <sup>r</sup>	XX	2,060,000
Hawaii:						
Gemstones, natural	NA	217	NA	107	NA	151
Sand and gravel, construction	1,390	17,500	1,230	15,900	1,180	14,200
Stone, crushed	8,230	107,000	8,980 <sup>r</sup>	138,000 <sup>r</sup>	8,610	135,000
Total	XX	125,000	XX	154,000 <sup>r</sup>	XX	150,000
Idaho:						
Gemstones, natural	NA	469	NA	388	NA	339
Sand and gravel, construction	18,600 <sup>r</sup>	81,900 <sup>r</sup>	23,800 <sup>r</sup>	117,000 <sup>r</sup>	24,700	129,000
Stone:						
Crushed	4,890	26,300	5,270 <sup>r</sup>	31,700 <sup>r</sup>	5,860	35,600
Dimension	(4)	W	(4)	W	17	1,690
Combined values of cadmium (byproduct from zinc concentrates), cement (portland), copper, feldspar, garnet (industrial), gold, lead, lime, molybdenum concentrates, perlite (crude), phosphate rock, pumice and pumicite, sand and gravel (industrial), silver, zeolites, zinc, and values indicated by symbol W	XX	788,000	XX	630,000	XX	612,000
Total	XX	896,000 <sup>r</sup>	XX	779,000 <sup>r</sup>	XX	779,000
Illinois:						
Cement, portland	3,240	286,000 <sup>e</sup>	3,110	308,000 <sup>e</sup>	3,120	309,000 <sup>e</sup>
Clays:						
Common	119	667	(4)	W	(4)	W
Fuller's earth	225	W	(4)	W	(4)	W
Gemstones, natural	NA	14	NA	34	NA	34
Sand and gravel:						
Construction	37,400	210,000	32,500	176,000	31,800	175,000
Industrial	5,510	104,000	5,410	102,000	4,090	86,800
Stone, crushed	76,400	549,000	78,300 <sup>r</sup>	596,000 <sup>r</sup>	74,500	591,000
Combined values of lime, peat, stone [dimension dolomite (2005)], tripoli, and values indicated by symbol W	XX	64,500	XX	63,400 <sup>r</sup>	XX	60,300
Total	XX	1,210,000	XX	1,250,000 <sup>r</sup>	XX	1,220,000

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Indiana:</b>						
Cement, portland	3,060	243,000 <sup>e</sup>	3,030	267,000 <sup>e</sup>	2,980	263,000 <sup>e</sup>
Clays, common	809	13,500	779	16,400	624	13,100
Gemstones, natural	NA	4	NA	4	NA	4
Sand and gravel, construction	28,400	135,000	29,300	153,000	28,100	153,000
<b>Stone:</b>						
Crushed	58,900	321,000	59,300 <sup>r</sup>	352,000 <sup>r</sup>	57,600	387,000
Dimension	240	46,300	233	39,000	236	37,800
Combined values of cement (masonry), clays (ball), gypsum (crude), lime, peat, sand and gravel (industrial)	XX	135,000	XX	159,000 <sup>r</sup>	XX	137,000
Total	XX	894,000 <sup>r</sup>	XX	986,000 <sup>r</sup>	XX	991,000
<b>Iowa:</b>						
Clays, common	630	4,740	356	2,750	331	2,630
Gemstones, natural	NA	2	NA	3	NA	3
Peat	(4)	W	(4)	60	(4)	W
Sand and gravel, construction	19,900	93,100	18,400 <sup>r</sup>	91,300 <sup>r</sup>	17,100	94,000
Stone, crushed	36,400	271,000	36,400 <sup>r</sup>	290,000 <sup>r</sup>	33,700	280,000
Combined values of cement, gypsum (crude), lime, sand and gravel (industrial), and values indicated by symbol W	XX	290,000 <sup>r</sup>	XX	313,000 <sup>r</sup>	XX	311,000
Total	XX	659,000 <sup>r</sup>	XX	697,000 <sup>r</sup>	XX	688,000
<b>Kansas:</b>						
Cement, portland	2,890	244,000 <sup>e</sup>	3,000	286,000 <sup>e</sup>	2,760	282,000 <sup>e</sup>
Clays, common	654	4,590	697	7,440	563	3,830
Gemstones, natural	NA	1	NA	1	NA	1
Helium, Grade-A million cubic meters	90	226,000	85	245,000	88	316,000
Salt	2,890	135,000	2,600 <sup>r</sup>	144,000	2,870	158,000
Sand and gravel, construction	10,100	36,900	12,100	50,000	10,700	49,600
<b>Stone:</b>						
Crushed	22,300	160,000	23,300 <sup>r</sup>	181,000 <sup>r</sup>	21,400	188,000
Dimension	13	1,590	17	2,270	18	2,540
Combined values of cement (masonry), clays (fuller's earth), gypsum (crude), helium (crude), pumice and pumicite, sand and gravel (industrial)	XX	64,100 <sup>r</sup>	XX	63,100 <sup>r</sup>	XX	67,200
Total	XX	873,000 <sup>r</sup>	XX	978,000 <sup>r</sup>	XX	1,070,000
<b>Kentucky:</b>						
Clays, common	1,060	4,370	1,000	5,140	598	3,720
Gemstones, natural	NA	78	NA	48	NA	48
Sand and gravel, construction	10,500	55,000	10,100	54,400	9,070	48,300
Stone, crushed	61,600	446,000	60,100 <sup>r</sup>	443,000 <sup>r</sup>	55,500	427,000
Combined values of cement, clays (ball), lime	XX	277,000	XX	311,000	XX	307,000
Total	XX	782,000	XX	814,000 <sup>r</sup>	XX	786,000
<b>Louisiana:</b>						
Clays, common	416	13,100	563	23,700	552	13,800
Gemstones, natural	NA	6	NA	7	NA	7
Salt	13,800	182,000	12,300 <sup>r</sup>	143,000 <sup>r</sup>	13,900	180,000
<b>Sand and gravel:</b>						
Construction	18,600	113,000	23,300	188,000	26,600	243,000
Industrial	509	11,600	663	16,100	635	21,200
Combined values of gypsum (crude), lime, stone (crushed limestone and sandstone)	XX	77,900 <sup>r</sup>	XX	94,500 <sup>r</sup>	XX	109,000
Total	XX	397,000 <sup>r</sup>	XX	465,000 <sup>r</sup>	XX	567,000

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Maine:</b>						
Clays, common	50	W	(4)	W	(4)	W
Gemstones, natural	NA	272	NA	275	NA	277
Sand and gravel, construction	11,100	57,400	10,400	62,400	12,300	93,900
Stone, crushed	4,450	30,800	5,340 <sup>r</sup>	41,500 <sup>r</sup>	4,710	38,300
Combined values of cement [masonry (2006–07), portland], peat, stone (dimension granite), and values indicated by symbol W	XX	52,400	XX	57,400	XX	55,100
Total	XX	141,000	XX	162,000 <sup>r</sup>	XX	188,000
<b>Maryland:</b>						
<b>Cement:</b>						
Masonry	(4)	(8)	(4)	(8)	(4)	(8)
Portland	2,550	210,000 <sup>e</sup>	2,650	237,000 <sup>e</sup>	3,000	265,000 <sup>e</sup>
Clays, common	317	686	286	851	173	412
Gemstones, natural	NA	1	NA	1	NA	1
Lime	(4)	(8)	(4)	(8)	(4)	(8)
<b>Sand and gravel:</b>						
Construction	12,300	89,500	11,900	96,700	11,900	117,000
Industrial	(4)	(8)	(4)	(8)	(4)	(8)
<b>Stone:</b>						
Crushed	33,500	277,000	33,100 <sup>r</sup>	326,000 <sup>r</sup>	31,500	287,000
Dimension	26	3,010	14	1,750	26	3,560
Total	XX	580,000	XX	663,000 <sup>r</sup>	XX	673,000
<b>Massachusetts:</b>						
Clays, common	37	(8)	36	(8)	31	(8)
Gemstones, natural	NA	1	NA	1	NA	1
Lime	(4)	(8)	(4)	(8)	(4)	(8)
Sand and gravel, construction	16,500	117,000	17,600	134,000	15,600	139,000
<b>Stone:</b>						
Crushed	14,500	121,000	13,600 <sup>r</sup>	143,000 <sup>r</sup>	11,200	127,000
Dimension	82	11,500	82	11,500	91	11,300
Total	XX	250,000	XX	288,000 <sup>r</sup>	XX	277,000
<b>Michigan:</b>						
<b>Cement:</b>						
Masonry	228	27,500 <sup>e</sup>	176	22,700 <sup>e</sup>	149	20,200 <sup>e</sup>
Portland	(4)	W	5,440	536,000 <sup>e</sup>	5,490	537,000 <sup>e</sup>
Clays, common	334	514	405	1,010	533	1,270
Gemstones, natural	NA	1	NA	2	NA	2
Gypsum, crude	1,000 <sup>r</sup>	8,690 <sup>r</sup>	932 <sup>r</sup>	8,220 <sup>r</sup>	809	8,030
Peat	117	3,300	32	W	(4)	W
<b>Sand and gravel:</b>						
Construction	64,800	243,000	50,500	215,000	57,600	235,000
Industrial	1,610	24,500	1,460	30,400	1,360	30,000
Stone, crushed	36,000	139,000	34,200 <sup>r</sup>	150,000 <sup>r</sup>	27,600	129,000
Combined values of bromine (2005–06), iron ore (usable shipped), iron oxide pigments [crude (2005)], lime, magnesium compounds, potash, salt, stone (dimension dolomite and sandstone), and values indicated by symbol W	XX	1,300,000	XX	981,000 <sup>r</sup>	XX	1,010,000
Total	XX	1,740,000 <sup>r</sup>	XX	1,940,000 <sup>r</sup>	XX	1,970,000
<b>Minnesota:</b>						
Clays, common	20	22	(4)	(8)	(4)	(8)
Gemstones, natural	NA	6	NA	6	NA	6
Iron ore, usable shipped	40,600	1,830,000	40,400	2,160,000	38,800	2,320,000
Lime	(4)	(8)	(4)	(8)	(4)	(8)
Peat	68	5,670	69	5,280	41	4,350
<b>Sand and gravel:</b>						
Construction	54,400 <sup>r</sup>	255,000 <sup>r</sup>	50,300	240,000	46,100	239,000
Industrial	(4)	(8)	(4)	(8)	(4)	(8)

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Minnesota—Continued::</b>						
Stone:						
Crushed	10,500	87,400	11,900 <sup>r</sup>	116,000 <sup>r</sup>	10,200	109,000
Dimension	19	13,400	22	12,400	22	12,400
Total	XX	2,190,000	XX	2,540,000	XX	2,690,000
<b>Mississippi:</b>						
Clays:						
Bentonite	(4)	W	78	5,180	67	4,610
Common	642	2,860	549	3,100	508	2,860
Fuller's earth	354	33,000	(4)	W	(4)	W
Gemstones, natural	NA	1	NA	1	NA	1
Sand and gravel, construction	14,400	85,200	19,300	133,000	13,900	94,200
Stone, crushed	3,520	47,800	3,070 <sup>r</sup>	53,700 <sup>r</sup>	3,120	58,900
Combined values of cement (portland), clays (ball), lime (2007), sand and gravel (industrial), and values indicated by symbol W	XX	52,000	XX	77,200 <sup>r</sup>	XX	76,900
Total	XX	221,000	XX	272,000 <sup>r</sup>	XX	238,000
<b>Missouri:</b>						
Cement, portland	5,330	464,000 <sup>e</sup>	5,240	500,000 <sup>e</sup>	5,230	515,000 <sup>e</sup>
Clays, common	822	3,400	750	4,160	426	4,370
Sand and gravel:						
Construction	12,200	61,600	17,000	92,100	14,000	77,400
Industrial	559	14,500	595	16,400	642	19,400
Stone, crushed	87,400	647,000	90,400 <sup>r</sup>	576,000 <sup>r</sup>	81,300	612,000
Combined values of cadmium (byproduct from zinc concentrates), cement (masonry), clays (fire, fuller's earth), copper, gemstones (natural), lead, lime, silver, stone (dimension granite), zinc	XX	666,000	XX	826,000 <sup>r</sup>	XX	1,040,000
Total	XX	1,860,000	XX	2,010,000 <sup>r</sup>	XX	2,270,000
<b>Montana:</b>						
Gemstones, natural	NA	644	NA	379	NA	386
Palladium <sup>5</sup> kilograms	13,300	87,100	14,400	150,000	12,800	148,000
Platinum <sup>5</sup> do.	3,920	113,000	4,290	158,000	3,860	162,000
Sand and gravel, construction	14,000	83,600	13,700	95,300	15,900	134,000
Stone:						
Crushed	3,430	16,600	4,040 <sup>r</sup>	21,800 <sup>r</sup>	1,780	9,610
Dimension	12	2,620	12	2,620	18	9,350
Combined values of cadmium (byproduct from zinc concentrates), cement, clays (bentonite, common), copper, garnet [industrial (2005, 2007), gold, lead, lime, molybdenum concentrates, peat (2005), silver, talc (crude), zinc	XX	543,000	XX	641,000	XX	898,000
Total	XX	847,000	XX	1,070,000	XX	1,360,000
<b>Nebraska:</b>						
Cement:						
Masonry	(4)	(8)	(4)	(8)	(4)	(8)
Portland	(4)	(8)	(4)	(8)	(4)	(8)
Clays, common	160 <sup>e</sup>	(8)	158 <sup>e</sup>	(8)	135 <sup>e</sup>	(8)
Gemstones, natural	NA	4	NA	4	NA	4
Lime	12	625	13	700	(4)	(8)
Sand and gravel, construction	14,300	60,200	13,100	62,000	13,400	70,600
Stone, crushed	6,950	54,100	7,480 <sup>r</sup>	67,100 <sup>r</sup>	7,720	76,200
Total	XX	115,000	XX	130,000 <sup>r</sup>	XX	147,000
<b>Nevada:</b>						
Clays:						
Bentonite	7	W	(4)	W	(4)	W
Fuller's earth	25	W	(4)	W	(4)	W
Gold <sup>5</sup> kilograms	212,000	3,030,000	206,000	4,010,000	186,000	4,170,000
Sand and gravel, construction	52,300	230,000	45,500	224,000	34,700	180,000

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1, 2, 3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Nevada—Continued:						
Silver <sup>5</sup> kilograms	276,000	65,200	260,000 <sup>r</sup>	97,200 <sup>r</sup>	243,000	105,000
Stone, crushed	9,460	67,900	10,200	88,000 <sup>r</sup>	11,200	97,200
Combined values of barite, brucite (2007), cement, clays (kaolin), copper, diatomite, gemstones (natural), gypsum (crude), lime, lithium carbonate, magnesite, molybdenum concentrates (2006–07), perlite (crude), pumice and pumicite (2006–07), salt, sand and gravel (industrial), zeolites, and values indicated by symbol W	XX	493,000 <sup>r</sup>	XX	720,000 <sup>r</sup>	XX	834,000
Total	XX	3,890,000	XX	5,140,000	XX	5,390,000
New Hampshire:						
Gemstones, natural	NA	6	NA	6	NA	6
Sand and gravel, construction	8,400	47,400	9,500	61,600	7,940	49,000
Stone:						
Crushed	5,100	40,900	6,440 <sup>r</sup>	55,400 <sup>r</sup>	5,210	68,600
Dimension, granite	(4)	(8)	(4)	(8)	(4)	(8)
Total	XX	88,200	XX	117,000 <sup>r</sup>	XX	118,000
New Jersey:						
Gemstones, natural	NA	1	NA	1	NA	1
Sand and gravel:						
Construction	21,200	145,000	20,900	192,000	15,700	145,000
Industrial	1,820	34,100	1,520	40,600	1,070	31,700
Stone, crushed	24,500	172,000	24,100 <sup>r</sup>	169,000 <sup>r</sup>	20,000	162,000
Combined values of clays (common), greensand marl, peat	XX	4,110	XX	3,390	XX	3,220
Total	XX	356,000	XX	404,000 <sup>r</sup>	XX	342,000
New Mexico:						
Clays, common	36	221	35	228	28	242
Copper <sup>5</sup>	131	502,000	113	784,000	108	783,000
Gemstones, natural	NA	19	NA	23	NA	24
Sand and gravel:						
Construction	16,000	112,000	18,400	157,000	18,300	157,000
Industrial	113	W	184	W	(4)	W
Silver <sup>5</sup> kilograms	6,390	1,510	(4)	W	(4)	W
Stone:						
Crushed	3,750	25,400	4,830 <sup>r</sup>	32,900 <sup>r</sup>	5,240	39,100
Dimension	7	279	(4)	W	(4)	W
Combined values of cement, gold, gypsum (crude), Helium [Grade–A (2006–07)], lime, molybdenum concentrates, perlite (crude), potash, pumice and pumicite, salt, zeolites, and values indicated by symbol W	XX	513,000	XX	509,000	XX	583,000
Total	XX	1,150,000	XX	1,480,000 <sup>r</sup>	XX	1,560,000
New York:						
Clays, common	785	11,700	813	30,400	699	28,500
Gemstones, natural	NA	78	NA	90	NA	96
Gypsum, crude	2,000 <sup>r</sup>	10,300 <sup>r</sup>	367 <sup>r</sup>	3,230 <sup>r</sup>	299	1,540
Salt	6,840	327,000	4,890 <sup>r</sup>	257,000	7,990	400,000
Sand and gravel, construction	31,300	204,000	35,000	236,000	33,300	278,000
Stone:						
Crushed	52,600	447,000	52,400 <sup>r</sup>	438,000 <sup>r</sup>	46,800	427,000
Dimension	42	7,470	39	3,860	49	6,450
Combined values of cadmium (byproduct from zinc concentrates), cement, garnet (industrial), peat, sand and gravel [industrial (2006)], talc (crude), wollastonite, zinc	XX	286,000	XX	368,000	XX	393,000
Total	XX	1,290,000	XX	1,340,000 <sup>r</sup>	XX	1,530,000

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
North Carolina:						
Clays:						
Common	2,180	13,900	2,340	24,200	1,720	19,100
Kaolin	27	593	26	950	20	792
Feldspar	351	19,000	362	19,100	(4)	W
Gemstones, natural	NA	280	NA	282	NA	384
Mica, crude	39	10,200	57	12,600	43	10,300
Sand and gravel:						
Construction	12,000	63,900	12,900	70,000	11,400	62,300
Industrial	1,150	29,200	1,220	24,700	1,670	61,500
Stone:						
Crushed	73,600 <sup>6</sup>	708,000 <sup>6</sup>	78,800 <sup>r</sup>	868,000 <sup>r</sup>	70,300	898,000
Dimension	39	17,000	41	17,800	41	17,800
Combined values of olivine (2007), phosphate rock, pyrophyllite (crude), stone [crushed quartzite (2005)], and value indicated by symbol W	XX	(8)	XX	(8)	XX	130,000
Total	XX	862,000	XX	1,040,000 <sup>r</sup>	XX	1,200,000
North Dakota:						
Clays, common						
	76	(8)	(4)	(8)	(4)	(8)
Gemstones, natural						
	NA	4	NA	4	NA	4
Lime						
	(4)	(8)	(4)	(8)	(4)	(8)
Sand and gravel, construction						
Construction	11,300	34,500	14,000	43,700	14,900	49,100
Industrial	(4)	(8)	(4)	(8)	(4)	(8)
Stone, crushed						
	89	396	147	683	274	1,270
Total	XX	34,900	XX	44,400	XX	50,300
Ohio:						
Cement, portland						
	986	89,200 <sup>e</sup>	966	96,100 <sup>e</sup>	916	92,000 <sup>e</sup>
Clays:						
Common						
	1,310	6,880	1,580	17,800	1,190	16,500
Fire						
	55	W	(4)	W	(4)	W
Gemstones, natural						
	NA	4	NA	4	NA	4
Lime						
	1,790	130,000	1,850	150,000	1,690	159,000
Sand and gravel:						
Construction	51,700	288,000	46,300	289,000	40,800	271,000
Industrial	1,230	37,900	1,110	33,800	1,080	33,000
Stone:						
Crushed						
	75,200	439,000	69,100 <sup>r</sup>	431,000 <sup>r</sup>	67,300	443,000
Dimension						
	28	4,880	29	4,950	18	3,330
Combined values of cement (masonry), peat, salt, and salt, and values indicated by symbol W	XX	211,000	XX	251,000	XX	254,000
Total	XX	1,210,000	XX	1,270,000	XX	1,270,000
Oklahoma:						
Clays, common						
	903	2,520	1,180	4,700	1,050	4,060
Gemstones, natural						
	NA	43	NA	106	NA	106
Gypsum, crude						
	2,340 <sup>r</sup>	16,400 <sup>r</sup>	3,420 <sup>r</sup>	30,200 <sup>r</sup>	3,410	26,100
Iodine, crude metric tons						
	1,570	W	(4)	W	(4)	W
Sand and gravel:						
Construction	13,300	65,000	17,000	91,900	16,700	96,200
Industrial	1,480	33,500	1,640	40,400	1,710	44,600
Stone:						
Crushed						
	47,300	269,000	43,800 <sup>r</sup>	258,000 <sup>r</sup>	45,800	294,000
Dimension						
	3	501	3	502	17	2,100
Tripoli metric tons						
	30,600	1,950	18,400	1,890	40,600	1,600
Combined values of cement, feldspar, helium (Grade-A), lime, salt, and values indicated by symbol W	XX	227,000	XX	263,000	XX	262,000
Total	XX	616,000 <sup>r</sup>	XX	690,000 <sup>r</sup>	XX	731,000

See footnotes at end of table.



TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Oregon:</b>						
Gemstones, natural	NA	1,180	NA	1,860	NA	2,150
Sand and gravel, construction	22,000	146,000	23,800	175,000	21,200	163,000
Stone, crushed	26,800	164,000	28,900 <sup>r</sup>	216,000 <sup>r</sup>	29,000	200,000
Combine values of cement (portland), clays (bentonite, common), diatomite, lime, perlite (crude), pumice and pumicite, talc [crude (2005–06)]	XX	128,000	XX	143,000	XX	128,000
Total	XX	439,000	XX	536,000 <sup>r</sup>	XX	493,000
<b>Pennsylvania:</b>						
<b>Cement:</b>						
Masonry	399	49,700 <sup>e</sup>	384	52,200 <sup>e</sup>	304	40,500 <sup>e</sup>
Portland	6,290	554,000 <sup>e</sup>	6,020	599,000 <sup>e</sup>	5,660	568,000 <sup>e</sup>
Clays, common	705	3,460	742	5,630	683	4,700
Gemstones, natural	NA	1	NA	1	NA	1
Lime	1,100	104,000	1,160	115,000	1,100	112,000
Peat	7	210	1	52	2	79
<b>Sand and gravel:</b>						
Construction	17,000	111,000	18,400	126,000	18,300	143,000
Industrial	711	15,400	696	15,500	685	15,800
<b>Stone:</b>						
Crushed	107,000	713,000	113,000 <sup>r</sup>	805,000 <sup>r</sup>	109,000	944,000
Dimension	35	11,800	38	12,800	31	12,600
Tripoli	(4)	(8)	(4)	(8)	(4)	(8)
Total	XX	1,560,000	XX	1,730,000 <sup>r</sup>	XX	1,840,000
<b>Rhode Island:</b>						
Gemstones, natural	NA	1	NA	1	NA	1
<b>Sand and gravel:</b>						
Construction	2,510	23,000	2,430	25,800	2,410	31,200
Industrial	(4)	(8)	(4)	(8)	(4)	(8)
Stone, crushed	1,610 <sup>6</sup>	12,300 <sup>6</sup>	2,570 <sup>r</sup>	21,300 <sup>r</sup>	2,240	21,200
Total	XX	35,300	XX	47,000 <sup>r</sup>	XX	52,300
<b>South Carolina:</b>						
<b>Cement:</b>						
Masonry	498	54,300 <sup>e</sup>	575	68,900 <sup>e</sup>	491	60,100 <sup>e</sup>
Portland	3,270	247,000 <sup>e</sup>	3,320	294,000 <sup>e</sup>	3,680	355,000 <sup>e</sup>
<b>Clays:</b>						
Common	1,020	3,610	992	4,250	826	2,610
Fire	54	892	60	348	37	83
Kaolin	287	17,700	294	17,900	297	17,600
Gemstones, natural	NA	1	NA	1	NA	1
<b>Sand and gravel:</b>						
Construction	11,100	45,200	10,900	51,100	10,700	57,000
Industrial	794	19,400	905	21,800	837	22,000
<b>Stone:</b>						
Crushed	33,800 <sup>6</sup>	258,000 <sup>6</sup>	31,200 <sup>r</sup>	268,000 <sup>r</sup>	28,100	274,000
Dimension	9	850	9	850	9	850
Combined values of mica (crude), stone [crushed marble (2005)], vermiculite (crude)	XX	12,600	XX	(8)	XX	(8)
Total	XX	659,000	XX	727,000 <sup>r</sup>	XX	789,000
<b>South Dakota:</b>						
Clays, common	183	W	176	W	151	W
Sand and gravel, construction	12,800	45,500	16,500 <sup>r</sup>	60,000 <sup>r</sup>	13,900	50,500
Stone, crushed	6,740	32,400	6,320	41,400 <sup>r</sup>	5,360	44,500
Combined values of cement (portland), feldspar, gemstones (natural), gold, gypsum (crude), iron ore (usable shipped), lime, mica (crude), stone (dimension granite), and values indicated by symbol W	XX	139,000	XX	129,000	XX	175,000
Total	XX	217,000	XX	230,000 <sup>r</sup>	XX	270,000

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007		
	Quantity	Value	Quantity	Value	Quantity	Value	
<b>Tennessee:</b>							
Clays:							
Ball	740	32,500	713 <sup>r</sup>	30,800 <sup>r</sup>	677	30,600	
Common	372	3,210	231	1,530	199	1,360	
Fuller's earth	91	W	(4)	W	(4)	W	
Kaolin	1	W	(4)	W	--	--	
Sand and gravel:							
Construction	7,570	51,500	8,500	57,900	7,140	50,900	
Industrial	985	26,500	1,010	29,300	1,070	32,400	
Stone, crushed	66,500	483,000	65,500 <sup>r</sup>	523,000 <sup>r</sup>	62,000	547,000	
Combined values of cadmium [byproduct from zinc concentrates (2007)], cement, gemstones (natural), lime, salt, stone (dimension marble), zinc (2007), and values indicated by symbol W	XX	174,000	XX	218,000	XX	313,000	
Total	XX	771,000	XX	861,000 <sup>r</sup>	XX	975,000	
<b>Texas:</b>							
Cement:							
Masonry	395	48,500 <sup>e</sup>	382	50,700 <sup>e</sup>	368	52,100 <sup>e</sup>	
Portland	11,600	951,000 <sup>e</sup>	11,300	1,070,000 <sup>e</sup>	10,900	1,060,000 <sup>e</sup>	
Clays:							
Ball	(4)	7,730	(4)	W	(4)	W	
Bentonite	(4)	W	71	4,000 <sup>r</sup>	64	3,730	
Common	2,340	8,680	2,360	12,600	1,950	12,100	
Gemstones, natural	NA	201	NA	202	NA	202	
Gypsum, crude	824 <sup>r</sup>	9,520 <sup>r</sup>	1,010 <sup>r</sup>	10,200 <sup>r</sup>	1,180	8,200	
Lime	1,610	112,000	1,650	130,000	1,620	132,000	
Salt	9,600	118,000	9,570	132,000	8,950	143,000	
Sand and gravel:							
Construction	80,700	472,000	99,500	603,000	95,400	651,000	
Industrial	2,840	114,000	1,530	65,600	3,280	123,000	
Stone:							
Crushed	137,000	820,000	139,000 <sup>r</sup>	853,000 <sup>r</sup>	145,000	972,000	
Dimension	44	12,200	31	12,600	44	13,900	
Combined values of brucite, clays (fuller's earth, kaolin), helium, talc (crude), zeolites, and values indicated by symbol W	XX	41,500	XX	68,200	XX	72,100	
Total	XX	2,710,000 <sup>r</sup>	XX	3,010,000 <sup>r</sup>	XX	3,240,000	
<b>Utah:</b>							
Beryllium concentrates	metric tons	2,780	NA	3,830	NA	3,810	NA
Clays, common		478	6,710	526	10,700	531	10,400
Gemstones, natural		NA	235	NA	238	NA	240
Salt		2,250	132,000	2,350 <sup>r</sup>	149,000	2,470	135,000
Sand and gravel, construction		33,900	149,000	42,400 <sup>r</sup>	204,000 <sup>r</sup>	45,100	261,000
Stone, crushed		8,570	52,100	14,000 <sup>r</sup>	89,100 <sup>r</sup>	13,300	98,200
Combined values of cement (portland), clays (bentonite), copper, gold, gypsum (crude), helium (Grade-A), lime, magnesium compounds, magnesium metal, molybdenum concentrates, perlite [crude (2005-06)], phosphate rock, potash, silver, stone (dimension sandstone)		XX	2,460,000	XX	3,560,000	XX	3,370,000
Total		XX	2,800,000	XX	4,010,000 <sup>r</sup>	XX	3,880,000
<b>Vermont:</b>							
Gemstones, natural		NA	1	NA	1	NA	1
Sand and gravel, construction		5,240	32,000	5,810	37,300	5,140	34,100
Stone:							
Crushed		4,960 <sup>6</sup>	37,900 <sup>6</sup>	5,840 <sup>r</sup>	49,900 <sup>r</sup>	5,660	40,100
Dimension		98	27,800	100	27,600	98	27,500
Talc, crude		(4)	(8)	(4)	(8)	(4)	(8)
Total		XX	97,700	XX	115,000 <sup>r</sup>	XX	102,000

See footnotes at end of table.

TABLE 5—Continued  
 NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1, 2, 3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Virginia:</b>						
Clays, common	983	4,690	762	1,810	725	6,360
Kyanite <sup>6</sup>	90	13,400	90	14,000	90 *	19,000
Mica, crude	--	--	--	--	(9)	1
Sand and gravel, construction	12,000	85,800	14,200	110,000	12,300	115,000
<b>Stone:</b>						
Crushed	85,700	772,000	77,400 †	845,000 †	62,200	693,000
Dimension	6	631	6	631	6	631
Talc, crude	1	15	(4)	W	--	--
Combined values of cement, clays (fuller's earth), feldspar, gemstones (natural), iron oxide pigments (crude), lime, salt (2007)*, sand and gravel (industrial), titanium concentrates (ilmenite), vermiculite (crude), zirconium concentrates, and value indicated by symbol W	XX	272,000	XX	317,000 †	XX	320,000
Total	XX	1,150,000	XX	1,290,000 †	XX	1,150,000
<b>Washington:</b>						
<b>Clays:</b>						
Common	(4)	W	53	149	84	170
Fire	--	--	25	41	--	--
Gemstones, natural	NA	44	NA	49	NA	49
Peat	(4)	W	(4)	W	(4)	66
Sand and gravel, construction	47,200	282,000	48,400	315,000	45,500	324,000
Stone, crushed	14,300	101,000	16,800 †	174,000 †	17,700	167,000
Combined values of cadmium (byproduct from zinc concentrates), cement (portland), diatomite, gold (2005), lead, lime, olivine, sand and gravel (industrial), silver (2005), stone (dimension miscellaneous), zinc, and values indicated by symbol W	XX	255,000	XX	270,000 †	XX	258,000
Total	XX	638,000	XX	759,000 †	XX	748,000
<b>West Virginia:</b>						
Clays, common	186	524	(4)	W	(4)	W
Gemstones, natural	NA	1	NA	1	NA	1
<b>Sand and gravel:</b>						
Construction	318	1,630	429	3,470	675	5,620
Industrial	369	17,800	333	17,200	345	17,600
Stone, crushed	14,600	108,000	14,500	120,000	15,900	157,000
Combined values of cement, lime, peat, salt, stone (dimension sandstone), and values indicated by symbol W	XX	81,100	XX	89,100	XX	87,400
Total	XX	209,000	XX	230,000	XX	268,000
<b>Wisconsin:</b>						
Cement, portland	(4)	(8)	--	--	--	--
Gemstones, natural	NA	6	NA	6	NA	6
Lime	888	61,300	922	70,700	959	78,000
Peat	(4)	(8)	(4)	(8)	(4)	26
<b>Sand and gravel:</b>						
Construction	43,200	191,000	39,600	182,000	38,200	186,000
Industrial	2,250	55,700	2,450	74,100	2,650	90,100
<b>Stone:</b>						
Crushed	39,800	234,000	40,000 †	225,000 †	25,600	151,000
Dimension	278	27,600	297	35,400	300	35,400
Total	XX	570,000	XX	587,000 †	XX	540,000

See footnotes at end of table.

TABLE 5—Continued  
NONFUEL MINERAL PRODUCTION IN THE UNITED STATES, BY STATE<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Wyoming:						
Clays:						
Bentonite	4,160	190,000	4,360	209,000	4,250	227,000
Common	53	128	53	206	59	226
Gemstones, natural	NA	14	NA	14	NA	15
Sand and gravel, construction	11,700	52,400	17,200	74,600	19,100	95,800
Stone, crushed	6,990	39,800	12,500 <sup>r</sup>	71,100 <sup>r</sup>	12,000	58,700
Combined values of cement (portland), gypsum (crude), helium (Grade-A), lime, soda ash, zeolites	XX	1,010,000	XX	1,240,000	XX	1,370,000
Total	XX	1,300,000	XX	1,590,000	XX	1,750,000
Undistributed:						
Connecticut, Delaware, Maryland, Massachusetts, Minnesota, Nebraska, New Hampshire, North Carolina (2005–06), North Dakota, Pennsylvania, Rhode Island, South Carolina (2006–07), Vermont (2005), Wisconsin, undistributed	XX	448,000	XX	490,000 <sup>r</sup>	XX	289,000

<sup>6</sup>Estimated. <sup>7</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; included in “Combined value” data for each State. XX Not applicable. -- Zero.

<sup>1</sup>Table includes data available through January 26, 2010.

<sup>2</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>3</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>4</sup>Withheld to avoid disclosing company proprietary data.

<sup>5</sup>Recoverable content of ores, etc.

<sup>6</sup>Excludes certain stones; kind and value included in “Combined value.”

<sup>7</sup>Grindstones, pulpstones, and sharpening stones; excludes mill liners and grinding pebbles.

<sup>8</sup>Withheld to avoid disclosing company proprietary data; value included in “Undistributed.”

<sup>9</sup>Less than ½ unit.

\*Correction posted on June 8, 2010.

TABLE 6  
NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED  
BY THE UNITED STATES<sup>1,2,3</sup>

(Thousand metric tons and thousand dollars)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:						
Cement, portland	1,580	W	1,550	W	1,390	W
Clays, common	116	596	111	614	96	547
Lime	11	2,250	11	2,250	11	2,250
Salt	45	1,500	45	1,500	45	1,600
Stone, crushed	8,300	55,500	14,800 <sup>r</sup>	92,600 <sup>r</sup>	13,500	94,200
Total	XX	59,800 <sup>r</sup>	XX	97,000 <sup>r</sup>	XX	98,600
Administered Islands:						
American Samoa, stone, crushed, traprock	W	W	W	W	W	W
Guam, stone, crushed	1,410	13,000	900	8,460 <sup>r</sup>	329	3,760
Virgin Islands, stone, crushed, limestone and traprock	257	2,730	210	2,010	W	W
Total	XX	15,800	XX	10,500 <sup>r</sup>	XX	3,760

<sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data.

<sup>1</sup>Table includes data available through January 26, 2010.

<sup>2</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>3</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7  
U.S. EXPORTS OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value	Quantity	Value	
<b>Metals:</b>					
<b>Aluminum:</b>					
Crude and semicrude	metric tons	2,820,000	7,550,000	2,840,000	8,280,000
Manufactures	do.	143,000	591,000	141,000	623,000
<b>Antimony:</b>					
Metal, alloys, waste and scrap	do.	459	1,860	305	1,120
Oxide, antimony content	do.	1,680	8,870	1,640	8,810
Arsenic metal, arsenic content	do.	3,060	5,960	2,490	5,010
<b>Bauxite and alumina:</b>					
Alumina, calcined equivalent		1,540	811,000	1,160	709,000
<b>Bauxite:</b>					
Calcined, refractory and other grade		13	2,390	8	1,540
Crude and dried		20	3,990	15	4,100
Speciality aluminum compounds, sulfate, chloride, fluoride-based	metric tons	44,000	42,400	46,000	46,700
Beryllium, unwrought, and waste and scrap, other including articles not elsewhere specified	kilograms	135,000	21,500	101,000	18,500
Bismuth, metal, alloys, waste and scrap, bismuth content	do.	311,000	3,540	421,000	6,230
<b>Cadmium:</b>					
Metal	do.	460,000	2,210	154,000	1,310
Sulfide, gross weight	do.	62,000	32	135,000	126
Unwrought and powder	do.	17,800	118	270,000	1,510
Waste and scrap	do.	5,140	1,540	--	--
<b>Chromium:</b>					
Ores and concentrate	metric tons	53,900	10,200	37,600	5,560
<b>Metals and alloys:</b>					
Metal, unwrought powders, waste and scrap, other	do.	1,020	21,300	1,210	23,200
Ferroalloys, high-carbon, low-carbon, ferrochromium-silicon	do.	35,700	38,100	41,100	51,200
<b>Chemicals:</b>					
Oxides, trioxides and other	do.	11,700	20,500	18,600	31,700
Sulfates	do.	35	145	23	250
Salts of oxometallic or peroxometallic acids, zinc and lead chromate, sodium dichromate, potassium dichromate, other	do.	29,900	24,400	31,900	28,400
Pigments and preparations	do.	1,330	6,620	1,410	9,930
<b>Cobalt:</b>					
Acetates and chlorides	do.	535	3,300	235	2,660
Oxides and hydroxides	do.	1,100	26,800	863	28,400
<b>Metal:</b>					
Unwrought, powders, waste and scrap, mattes, other intermediate products of metallurgy	do.	1,930	60,500	2,420	69,300
Wrought and cobalt articles	do.	1,980	90,400	1,440	89,300
<b>Copper:</b>					
Unmanufactured, does not include unalloyed scrap, copper content	do.	328,000	1,160,000	263,000	1,290,000
Semimanufactures	do.	265,000 †	1,830,000 †	254,000	2,020,000
Scrap, alloyed and unalloyed	do.	803,000	2,350,000 †	907,000	2,840,000
<b>Ferroalloys not listed elsewhere:</b>					
Ferrophosphorous	do.	1,820	2,270	815	1,610
Other	do.	3,150	5,740	4,620	7,110
<b>Gold:</b>					
Ores and concentrates	kilograms	2,690	31,800	3,180	34,100
Doré and precipitates	do.	159,000	2,670,000	123,000	2,740,000
Bullion, refined	do.	228,000	4,380,000	392,000	8,700,000
Waste and scrap	do.	567,000	1,270,000	616,000	1,480,000
Metal powder	do.	1,320	25,400	2,840	48,900
Compounds	do.	1,460,000	28,100	2,150,000	40,100
<b>Iron and steel:</b>					
Steel mill products		8,830	NA	10,100	NA
Fabricated steel products		1,540	NA	1,570	NA
Cast iron and steel products		268	NA	236	NA

See footnotes at end of table.

TABLE 7—Continued  
U.S. EXPORTS OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007	
	Quantity	Value	Quantity	Value
Metals—Continued:				
Iron and steel scrap:				
Ferrous, includes tinplate and ternplate, excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping	14,900	4,230,000	16,500	6,890,000
Pig iron, all grades	813	8,750	71	4,610
Direct-reduced iron, steelmaking grade	(3)	11	(3)	23
Ships, boats, and other vessels for scrapping	5	509	143	23,700
Used rails for rerolling and other uses, includes mixed (used plus new) rails	51	36,400	97	69,600
Iron ore	8,270	636,000	9,310	719,000
Lead:				
Base bullion, Pb content metric tons	197	1,560	170	868
Ore and concentrates, Pb content do.	298,000	278,000	300,000	504,000
Unwrought and alloys, Pb content do.	52,700	57,800	51,800	81,000
Wrought and alloys, Pb content do.	15,800	40,200	4,610	7,530
Scrap, gross weight do.	121,000	37,200	129,000	55,400
Magnesium:				
Waste and scrap, Mg content do.	3,680	8,410	1,800	4,000
Metal, Mg content do.	4,170	9,520	4,290	10,300
Alloys, gross weight do.	2,290	8,200	7,570	23,600
Powder, sheets, tubing, ribbons, wire, other forms, gross weight do.	2,180	25,500	1,170	22,800
Manganese, gross weight:				
Ores and concentrates with 20% or more manganese do.	2,240	1,120	28,700	5,200
Ferromanganese, all grades do.	21,700	14,100	29,100	25,000
Silicomanganese do.	947	888	3,310	3,230
Metal, including alloys and waste and scrap do.	3,900	9,610	3,280	8,880
Dioxide do.	5,820	5,580	9,320	8,640
Mercury:				
Metal do.	390	5,870	84	1,430
Amalgams of precious metals whether or not chemically defined do.	378 <sup>r</sup>	430,000	498	529,000
Molybdenum:				
Ore and concentrates, including roasted and other, Mo content do.	37,200	1,460,000	33,800	1,640,000
Chemicals:				
Oxides and hydroxides, gross weight do.	11,600	300,000	14,900	378,000
Molybdates, all, gross weight do.	2,030	51,900 <sup>r</sup>	1,440	42,500
Ferromolybdenum, Mo content do.	2,010	42,500	1,220	67,900
Other, includes powders, unwrought, bars and rods, waste and scrap, wire, other, gross weight do.	2,010	143,000	2,140	156,000
Nickel, Ni content:				
Primary, unwrought and chemicals do.	8,050	286,000	13,100	356,000
Secondary, stainless steel scrap and waste and scrap do.	59,300	866,000	103,000	1,920,000
Wrought, not alloyed, bars, rods, profiles, wire, sheets, strip, foil, tubes, pipes do.	1,230	28,300	1,590	41,600
Alloyed, unwrought ingot, bars, rods, profiles, wire, sheets, strip, foil, tubes, pipes, other alloyed articles, gross weight do.	39,200	1,120,000	35,500	1,450,000
Niobium (columbium) and tantalum:				
Niobium:				
Ores and concentrates do.	69	914	163	3,670
Ferroniobium do.	706	6,680	1,580	17,200
Tantalum:				
Ores and concentrates, includes synthetic do.	784	13,400	360	1,590
Unwrought powders, waste and scrap, unwrought alloys and metal do.	611	73,400	270	62,200
Wrought do.	91	39,100	96	43,100
Platinum-group metals:				
Palladium, Pd content kilograms	53,100	402,000	41,800	298,000
Platinum, includes waste and scrap and metal, Pt content do.	74,900 <sup>r</sup>	1,760,000	83,300	1,690,000
Iridium, osmium, ruthenium, gross weight do.	3,390	35,800	8,190	145,000
Rhodium, Rh content do.	1,600	108,000	2,210	401,000
Rare earths, estimated rare-earth oxide content:				
Cerium compounds do.	2,010,000	19,800	1,470,000	11,100
Compounds, inorganic and organic do.	2,700,000	17,300	1,300,000	13,800

See footnotes at end of table.

TABLE 7—Continued  
U.S. EXPORTS OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value	Quantity	Value	
Metals—Continued:					
Rare earths, estimated rare-earth oxide content—Continued:					
Metals, including scandium and yttrium	kilograms	733,000	6,960	1,470,000	20,200
Ferrocerium and other pyrophoric alloys	do.	3,710,000	11,000	3,210,000	16,200
Selenium and tellurium:					
Selenium, Se content	do.	191,000	2,970	562,000	9,500
Tellurium, Te content	do.	3,550	711	15,100	1,530
Silicon, gross weight:					
Ferrosilicon	metric tons	9,330	10,400	11,600	14,100
Metal	do.	27,100	1,270,000	28,600	1,870,000
Silver:					
Bullion, Ag content	kilograms	1,500,000	586,000	660,000	274,000
Doré, Ag content	do.	85,400	33,600	51,500	21,700
Metal powder, gross weight	do.	1,460,000	255,000	1,500,000	302,000
Nitrate, gross weight	do.	62,300	6,450	47,100	4,930
Ores and concentrates, Ag content	do.	3,150	4,040	15,800	7,020
Semimanufactured forms containing 99.5% or more by weight of silver, gross weight	do.	526,000	91,200	659,000	150,000
Waste and scrap, gross weight	do.	4,890,000	1,140,000	238,000	233,000
Unwrought, other, gross weight	do.	85,600	30,800	70,000	22,400
Thorium and thorium-bearing materials:					
Thorium ore, monazite concentrate	do.	--	--	1,000	35
Compounds	do.	1,090	424	1,630	500
Tin:					
Ingots and pigs	metric tons	5,490	40,500	6,410	46,400
Tin scrap and other tin bearing material, except tinplate scrap, includes rods, profiles, wire, powders, flakes, tubes, pipes	do.	23,500	63,000	13,000	53,300
Tinplate and terneplate	do.	198,000	137,000	194,000	118,000
Titanium:					
Metal, waste and scrap, unwrought, wrought products and castings, ferrotitanium and ferrosilicon titanium	do.	30,800	1,040,000	32,400	1,200,000
Ores and concentrates	do.	32,800	11,800	9,730	5,140
Pigment, dioxide and oxide	do.	581,000	1,080,000	682,000	1,280,000
Tungsten, W content:					
Ammonium paratungstate	do.	350	4,970	731	11,700
Carbide powder	do.	1,010	35,100	1,280	43,700
Metal powders	do.	959 <sup>e</sup>	45,300	1,050 <sup>e</sup>	51,900
Miscellaneous tungsten-bearing materials, ferrotungsten, ferrosilicon tungsten, unwrought, waste and scrap, wrought, compounds	do.	3,980 <sup>f</sup>	91,800	2,890	77,800
Ores and concentrates	do.	130 <sup>e</sup>	3,550	109 <sup>e</sup>	2,720
Vanadium:					
Aluminum-vanadium master alloy, gross weight	kilograms	17,000,000 <sup>f</sup>	54,500	21,100,000	72,700
Ferrovandium, V content	do.	389,000 <sup>f</sup>	11,400	154,000	5,810
Metal, including waste and scrap, gross weight	do.	491,000	13,200	49,400	2,690
Pentoxide, anhydride, V content	do.	341,000	7,150	327,000	5,460
Other oxides and hydroxides, V content	do.	832,000	7,780	626,000	7,530
Zinc:					
Compounds, chloride, chromates of zinc or of lead, compounds n.s.p.f., lithopone, oxide, sulfate, sulfide, gross weight	metric tons	74,800	76,100	42,800	77,000
Ores and concentrates, Zn content	do.	825,000	1,060,000	816,000	1,170,000
Rolled	do.	3,780	16,000	4,310	20,600
Slab	do.	2,530	3,800	8,070	6,420
Zirconium:					
Ferrozirconium	do.	491	853	259	414
Ores and concentrates	do.	76,300	69,200	66,200	65,400
Oxide, includes germanium oxides and zirconium dioxides	do.	3,340	29,800	2,400	30,900
Unwrought powders	do.	202	5,310	228	7,930
Waste and scrap	do.	1,680	120,000	1,930	150,000
Total		XX	43,200,000 <sup>f</sup>	XX	54,500,000

See footnotes at end of table.

TABLE 7—Continued  
U.S. EXPORTS OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value	Quantity	Value	
<b>Industrial minerals:</b>					
<b>Abrasives, manufactured:</b>					
Aluminum oxide, crude	metric tons	15,300	41,200	18,200	47,200
Metallic abrasives	do.	22,300	24,400	26,800	40,100
Silicon carbide, crude, ground and refined	do.	20,200	28,700	19,300	40,200
<b>Asbestos, includes reexports:</b>					
Manufactured		NA	443,000	NA	29,200
Unmanufactured	metric tons	3,410	866	815	421
Barite, natural barium sulfate	do.	71,900 <sup>r</sup>	12,100 <sup>r</sup>	15,000	6,300
<b>Boron minerals and compounds:</b>					
Boric acid, includes orthoboric and anhydrous		221	127,000	248	124,000
Sodium borates		393	139,000	446	146,000
<b>Bromine:</b>					
Compounds, includes methyl bromine and ethylene dibromide, Br content	metric tons	7,920	17,600	7,280	13,600
Elemental, gross weight	do.	4,470 <sup>r</sup>	5,370 <sup>r</sup>	5,660	6,090
Cement, hydraulic and clinker		723 <sup>r</sup>	67,900 <sup>r</sup>	886	94,300
<b>Clays:</b>					
Ball		140	7,890	83	5,610
Bentonite		1,270	132,000	1,430	158,000
Fire		348	38,100	425	47,700
Fuller's earth		69	16,400	134	37,700
Kaolin		3,540	626,000	3,300	615,000
Other, n.e.c., includes chamotte or dinas earth, activated clays and earths, artificially activated clays		607	181,000	279	63,600
<b>Diamond:</b>					
Gemstones, natural, including reexports	thousand carats	32,600	9,540,000	36,100	11,800,000
<b>Industrial including exports and reexports:</b>					
Unworked	do.	1,560	26,900	2,120	32,400
Powder, dust and grit, natural and synthetic	do.	99,700	58,800	114,000	62,600
Diatomite		150	158,000	143	60,000
Feldspar	metric tons	10,400	1,940	9,980	1,950
Fluorspar	do.	13,000	2,430	13,600	2,650
Garnet, industrial <sup>e</sup>		13	9,450	12	9,620
Graphite, natural and artificial	metric tons	58,600	124,000	59,800	147,000
<b>Gypsum and gypsum products:</b>					
Crude		143	18,300	147	23,500
Plasters		209	36,700	201	43,600
Boards		98	69,900	100	99,500
Other		XX	37,400	XX	8,000
Helium, Grade-A	million cubic meters	62	126,000	64	136,000
<b>Iodine:</b>					
Crude/resublimed	metric tons	1,580 <sup>r</sup>	24,500 <sup>r</sup>	1,060	19,300
Potassium iodide	do.	108 <sup>r</sup>	1,930 <sup>r</sup>	82	1,950
<b>Iron oxide pigments and hydroxides:</b>					
Pigment grade	do.	3,100	8,090	5,410	15,900
Other grade	do.	68,300	44,400	63,100	33,500
Kyanite, andalusite, sillimanite <sup>e</sup>		35	7,500 <sup>r</sup>	36	8,650
Lime		116	19,200	144	24,800
<b>Lithium chemicals:</b>					
Carbonate	metric tons	3,130	10,500	2,550	11,700
Hydroxide	do.	5,540	27,900	5,840	40,700
<b>Magnesium compounds:</b>					
Compounds, chlorides, hydroxide and peroxide, sulfates	do.	31,700	21,900	34,100	22,900
<b>Magnesite, crude and processed:</b>					
Caustic-calcined magnesia	do.	5,690	3,210	4,420	2,780
Dead-burned and fused magnesia	do.	20,000	11,400	22,400	12,000
Other magnesia	do.	21,200	18,900	15,500	16,500
Crude	do.	9,020	1,080	11,700	1,550

See footnotes at end of table.



TABLE 7—Continued  
 U.S. EXPORTS OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value	Quantity	Value	
Industrial minerals—Continued:					
Mica:					
Scrap and flake:					
Powder	metric tons	4,990	4,650	5,170	6,030
Waste	do.	2,240 <sup>r</sup>	704 <sup>r</sup>	2,470	732
Sheet:					
Unworked	do.	113	273	122	397
Worked	do.	1,280	15,100	1,170	18,800
Nitrogen, major compounds, gross weight					
Peat		9,990	NA	8,160	NA
Perlite, crude <sup>e</sup>	metric tons	41	5,030	56	6,140
Potash:					
Potassium chloride	do.	337,000	NA	181,000	NA
Potassium sulfates, all grades	do.	467,000	NA	324,000	NA
Potassium nitrate	do.	3,750	2,520	4,670	3,870
Pumice and pumicite		18 <sup>r</sup>	5,940	9	4,400
Salt		973	54,900	833	59,600
Sand and gravel:					
Construction:					
Sand		113	19,700	107	23,000
Gravel		402	4,410	258	5,740
Industrial		3,830	183,000	3,020	242,000
Silica, special stone products		NA	9,900	NA	8,600
Soda ash		4,820	736,000	5,130	734,000
Stone:					
Crushed		1,140	57,300	1,020	62,500
Dimension		XX	76,000	XX	74,300
Strontium compounds:					
Carbonate, precipitated	metric tons	150	157	116	173
Oxide, hydroxide, peroxide	do.	871	594	904	812
Sulfur:					
Elemental		635	43,800	922	84,800
Sulfuric acid, 100% H <sub>2</sub> SO <sub>4</sub>	metric tons	248,000	22,200 <sup>r</sup>	336,000	34,300
Talc, excludes powders—talcum (in package), face, compact		163 <sup>r</sup>	42,100 <sup>r</sup>	183	46,700
Vermiculite <sup>e</sup>		5	930	5	985
Wollastonite <sup>e</sup>	metric tons	3,000	900	2,000	600
Zeolites <sup>e</sup>	do.	1,000	200	250	56
Total		XX	13,600,000 <sup>r</sup>	XX	15,500,000
Grand total		XX	56,800,000 <sup>r</sup>	XX	70,000,000

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. XX Not applicable.

<sup>1</sup>Table includes data available through January 26, 2010.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Less than ½ unit.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	
<b>Metals:</b>					
<b>Aluminum:</b>					
Crude and semicrude	metric tons	5,180,000	14,500,000	4,490,000	13,400,000
Manufactures	do.	344,000	1,200,000	330,000	1,230,000
<b>Antimony:</b>					
Metal	do.	7,260	31,800	5,920	28,300
Ore and concentrate, antimony content	do.	153	653	226	1,110
Oxide, antimony content	do.	23,000	102,000	21,700	118,000
<b>Arsenic:</b>					
Acid	do.	24	52	12	28
Metal	do.	1,070	3,640	739	3,410
Sulfide	do.	75	179	103	241
Trioxide	do.	12,400	6,020	9,220	4,140
<b>Bauxite and alumina:</b>					
Alumina, calcined equivalent		1,860	791,000	2,440	1,040,000
<b>Bauxite:</b>					
Calcined, refractory and other grade		753	86,400	807	99,200
Crude and dried		11,600	313,000 <sup>r</sup>	9,840	280,000
Speciality aluminum compounds, sulfate, chloride, fluoride-based	metric tons	25,500	12,700	42,800	36,400
Beryllium, ore, concentrates, oxide, hydroxide, unwrought including powders, waste and scrap, other, beryllium-copper master alloys, beryllium-copper plates, sheets, strip	kilograms	1,380,000	19,000	1,190,000	17,300
Bismuth, metallic	do.	2,300,000	21,900	3,070,000	58,000
<b>Cadmium:</b>					
Metal	do.	1,220	207 <sup>r</sup>	1,300	237
Sulfide, gross weight	do.	115,000	350	245,000	1,150
Unwrought and powder	do.	179,000	902	315,000	1,880
<b>Chromium:</b>					
Chromite ore	metric tons	162,000 <sup>r</sup>	23,500	145,000	22,700
<b>Metals and alloys:</b>					
Ferroalloys, high-carbon, low-carbon, ferrochromium-silicon	do.	459,000	353,000 <sup>r</sup>	466,000	515,000
Metal, unwrought powders, waste and scrap, other	do.	10,900	89,000	11,700	97,400
<b>Chemicals:</b>					
Oxides, hydroxides, trioxides and other	do.	11,400	26,000	10,500	26,200
Sulfates	do.	422	823	186	546
Salts of oxometallic or peroxometallic acids, zinc and lead chromate, sodium dichromate, potassium dichromate, other	do.	16,800	12,700	14,600	19,900
Carbide	do.	126	2,010	143	1,800
Pigments and preparations based on chromium	do.	6,550	21,700	3,430	14,700
<b>Cobalt:</b>					
<b>Metal:</b>					
Alloys, unwrought, waste and scrap, wrought, cobalt articles	do.	997	29,400	1,450	40,000
Unwrought, excluding alloys and waste and scrap, includes cathode and metal powder, may include intermediate products of cobalt metallurgy	do.	9,950	302,000	8,960	487,000
Oxide and hydroxides	do.	1,180	29,400	1,020	44,400
Other forms, includes acetates, carbonates, chlorides, sulfates	do.	2,330	24,200	1,950	31,100
<b>Copper:</b>					
Unmanufactured, does not include unalloyed scrap, copper content	do.	1,250,000	7,610,000	985,000	7,040,000
Semimanufactures	do.	512,000	3,240,000	372,000	2,490,000
Scrap, alloyed and unalloyed	do.	118,000	481,000	113,000	665,000
<b>Ferroalloys not listed elsewhere:</b>					
Ferrophosphorus	metric tons	11,400	6,060	6,890	4,000
Other	do.	7,310	13,700	6,740	14,100
<b>Gallium:</b>					
Unwrought and waste and scrap	kilograms	26,900	8,210	37,100	15,500
Gallium arsenide wafers, doped and undoped	do.	189,000	202,000	182,000	176,000
Germanium, wrought, unwrought, waste and scrap, gross weight	do.	24,100	17,900	25,400	27,200

See footnotes at end of table.

TABLE 8—Continued  
 U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	
<b>Metals—Continued:</b>					
<b>Gold:</b>					
Ores and concentrates	kilograms	1,090	12,600	845	7,420
Doré and precipitates	do.	125,000	1,990,000	56,000	1,040,000
Bullion, refined	do.	136,000	2,550,000	113,000	2,440,000
Waste and scrap	do.	43,000	448,000	42,600	490,000
Metal powder	do.	1,460	13,600	1,120	12,300
Compounds	do.	122,000	2,450	162,000	3,170
Indium, unwrought and waste and scrap	do.	100,000	71,400	147,000	56,400
<b>Iron and steel:</b>					
Steel mill products		41,100	NA	30,200	NA
Fabricated steel products		5,930	NA	5,760	NA
Cast iron and steel products		751	NA	781	NA
Stainless steel	metric tons	627,000 <sup>r</sup>	NA	669,000	NA
<b>Iron and steel scrap:</b>					
Ferrous, includes tinplate and ternplate, excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping		4,820	1,250,000	3,700	1,040,000
Pig iron, all grades		6,730	1,760,000	5,220	1,660,000
Direct-reduced iron, steelmaking grade		2,610	417,000	2,330	519,000
Ships, boats, and other vessels for scrapping		(4)	49	(4)	157
Used rails for rerolling and other uses, includes mixed (used plus new) rails		185	65,600	83	40,400
Iron ore		11,500	611,000	9,400	543,000
<b>Lead:</b>					
Pigs and bars, Pb content	metric tons	331,000	413,000	263,000	571,000
Pigments and compounds, Pb content	do.	27,900	55,400	21,200	51,100
Scrap, reclaimed, includes ash and residues, Pb content	do.	1,560	1,650	2,430	2,740
Wrought, all forms, including wire and powders, gross weight	do.	12,100	35,500	4,180	13,600
<b>Magnesium:</b>					
Waste and scrap, gross weight	do.	17,200	23,700	21,200	34,500
Metal, gross weight	do.	31,900	74,900	27,200	73,500
Alloys, Mg content	do.	25,200	88,200	21,900	79,600
Powder, sheets, tubing, ribbons, wire, other forms, Mg content	do.	927	10,100	1,490	9,650
<b>Manganese:</b>					
Ores and concentrates with 20% or more manganese, Mn content	do.	270,000	53,900	298,000	57,600
Ferromanganese, all grades, Mn content	do.	282,000	275,000	247,000	358,000
Silicomanganese, Mn content	do.	264,000	288,000	278,000	489,000
Metal, unwrought, other wrought, waste and scrap, gross weight	do.	32,900	46,700	38,000	95,700
Chemicals, manganese dioxide and potassium permanganate, gross weight	do.	37,700	49,600	31,300	41,100
<b>Mercury:</b>					
Metal	do.	94	2,320	67	1,360
Amalgams of precious metals whether or not chemically defined	do.	27	115,000	--	--
<b>Molybdenum:</b>					
Ores and concentrates, including roasted and other, Mo content	do.	10,900	395,000	12,400	553,000
<b>Chemicals, gross weight:</b>					
Oxides and hydroxides	do.	629	24,300	211	8,020
Molybdates, all	do.	1,670 <sup>r</sup>	36,900	1,090	32,500
Orange	do.	822 <sup>r</sup>	5,110	600	4,040
Ferromolybdenum, Mo content	do.	3,060	165,000	4,100	270,000
Other, includes powders, unwrought, bars and rods, waste and scrap, wire, other, gross weight	do.	1,160	75,700	946	70,900
<b>Nickel, Ni content:</b>					
Primary, chemicals and unwrought	do.	153,000	3,190,000	125,000	4,780,000
Secondary, stainless steel scrap and waste and scrap	do.	20,300	307,000	16,200	349,000
Wrought, not alloyed, bars, rods, profiles, wire, sheets, strip, foil, tubes, pipes	do.	1,110	29,900	932	36,900
Alloyed, unwrought ingot, bars, rods, profiles, wire, sheets, strip, foil, tubes, pipes, other alloyed articles	do.	27,200	640,000	24,100	871,000

See footnotes at end of table.

TABLE 8—Continued  
U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	
<b>Metals—Continued:</b>					
Niobium (columbium) and tantalum:					
Niobium:					
Ores and concentrates	metric tons	5	98	1	26
Oxide	do.	1,090	15,300	1,060	18,800
Ferroniobium	do.	12,500	114,000	12,900	184,000
Unwrought and powder	do.	1,450	30,900	864	26,100
Tantalum:					
Ores and concentrates, includes synthetic concentrates	do.	1,060	42,300	969	49,700
Unwrought powders, waste and scrap, unwrought alloys and metal	do.	798	120,000	781	94,800
Wrought	do.	38	11,200	81	17,900
Platinum-group metals, metal content:					
Platinum, grains and nuggets, sponge, other unwrought, other, waste and scrap, coins	kilograms	111,000 <sup>r</sup>	2,700,000 <sup>r</sup>	181,000	3,570,000
Palladium, unwrought and other	do.	119,000	1,110,000	113,000	1,250,000
Iridium, unwrought and other forms	do.	2,800	30,100	3,410	41,900
Osmium, unwrought	do.	56	487	23	192
Ruthenium, unwrought	do.	36,000	187,000	48,700	655,000
Rhodium, unwrought and other forms	do.	15,900	1,920,000	16,600	2,650,000
Rare earths, estimated equivalent rare-earth oxide (REO) content:					
Cerium compounds, including oxides, hydroxides, nitrates, sulfate chlorides, oxalates	do.	2,590,000	10,800	2,680,000	12,100
Yttrium compounds content by weight greater than 19% but less than 85% oxide equivalent	do.	168,000	2,320	21,400	1,860
Compounds, including oxides, hydroxides, nitrates, other compounds except chlorides	do.	10,600,000	66,300	9,900,000	78,100
Mixtures of REOs except cerium oxide	do.	1,570,000	8,740	2,570,000	14,900
Metals, whether intermixed or alloyed	do.	867,000	5,980	784,000	6,470
Mixtures of rare-earth chlorides, except cerium chloride	do.	2,750,000	7,670	1,610,000	11,700
Ferrocerium and other pyrophoric alloys	do.	127,000	2,110	123,000	2,320
Rhenium:					
Metal	do.	22,000	27,800	30,500	49,600
Ammonium perrhenate	do.	24,300 <sup>r</sup>	20,500	15,100	41,400
Selenium and tellurium:					
Selenium, Se content:					
Selenium	do.	398,000	18,000	536,000	26,000
Dioxide	do.	10,600 <sup>r</sup>	805	8,180	658
Tellurium, Te content	do.	31,100	3,630	43,700	4,980
Silicon, gross weight:					
Ferrosilicon	metric tons	327,000	244,000	309,000	282,000
Metal	do.	149,000	394,000	149,000	529,000
Silver:					
Ash and residues, Ag content	kilograms	4,800	1,110	7,260	1,630
Bullion, Ag content	do.	4,280,000	1,520,000	4,210,000	1,720,000
Doré, Ag content	do.	286,000	134,000	551,000	324,000
Metal powder, gross weight	do.	30,700	5,690	47,000	6,590
Nitrate, gross weight	do.	1,260	255	496	128
Ores and concentrates, Ag content	do.	--	--	381	130
Semimanufactured forms containing 99.5% or more by weight of silver, gross weight	do.	194,000	71,500	397,000	138,000
Waste and scrap, gross weight	do.	2,510,000	275,000	3,420,000	482,000
Unwrought, other, gross weight	do.	259,000	91,300	222,000	82,800
Thallium, unwrought powders, waste and scrap, other	do.	530	67	1,000	234
Thorium:					
Thorium ore, monazite concentrate	do.	10,000	5	--	--
Compounds	do.	48,600	1,560	6,370	318
Tin, gross weight:					
Compounds	metric tons	440	4,320	448	6,260
Dross, skimmings, scrap, residues, alloys, n.s.p.f.	do.	7,750	34,300	11,700	25,800
Metal, unwrought	do.	43,300	365,000	34,600	473,000
Miscellaneous, includes tin foil, tin powder, flitters, metallics, manufactures, n.s.p.f.	do.	NA	23,000	NA	38,400

See footnotes at end of table.

TABLE 8—Continued

U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	
<b>Metals—Continued:</b>					
<b>Tin—Continued:</b>					
Tinplate and terneplate, gross weight	metric tons	495,000	371,000	471,000	369,000
Tinplate scrap, gross weight	do.	10,300	2,530	6,690	2,050
<b>Titanium:</b>					
<b>Concentrate:</b>					
Ilmenite	do.	187,000	20,100	246,000	26,900
Rutile, natural and synthetic	do.	355,000	162,000	464,000	201,000
<b>Metal:</b>					
Waste and scrap	do.	12,800	200,000	12,200	133,000
Unwrought	do.	24,400	252,000	25,900	321,000
Ingots	do.	3,140	58,800	2,270	53,500
Powder	do.	152	5,170	246	9,790
Other	do.	1,520	35,600	101	1,630
Wrought products and castings, includes bar, castings, foil, pipe, plate, profile, rod, sheet, strip, tube, wire, other	do.	5,360	181,000	5,350	229,000
Ferrotitanium and ferrosilicon titanium	do.	7,080	63,400	7,620	35,300
Pigment, dioxide and oxide	do.	288,000	526,000	221,000	432,000
Titaniferous iron ore	do.	49,800	3,240	72	8
Titaniferous slag	do.	693,000	276,000	749,000	302,000
<b>Tungsten, W content:</b>					
Ammonium paratungstate	do.	2,900	78,200	2,700	69,400
Ferrotungsten and ferrosilicon tungsten	do.	265	7,990	357	9,580
Miscellaneous tungsten-bearing materials, metal powders, carbide powder, unwrought, waste and scrap, wrought, oxides, calcium tungstate, other tungstates, other compounds	do.	6,540	232,000	5,990	218,000
Ores and concentrates	do.	2,290	49,500	3,880	87,000
<b>Vanadium:</b>					
Aluminum-vanadium master alloy, gross weight	kilograms	102,000	312	1,110,000	2,110
Ferrovandium, V content	do.	2,140,000	90,500	2,220,000	81,300
Metal, including waste and scrap, gross weight	do.	122,000 <sup>r</sup>	5,280 <sup>r</sup>	3,620	198
Miscellaneous chemicals, sulfates and vanadates, V content	do.	115,000	3,360 <sup>r</sup>	291,000	4,340
Pentoxide, anhydride, V content	do.	1,920,000	45,200	2,390,000	46,800
Vanadium-bearing ash, residues, slag from the manufacture of iron and steel, V <sub>2</sub> O <sub>5</sub> content	do.	2,140,000 <sup>r</sup>	9,260 <sup>r</sup>	2,010,000	11,800
Other oxides and hydroxides, V content	do.	129,000	3,370	41,900	1,400
<b>Zinc:</b>					
Compounds, chloride, chromates of zinc or of lead, compounds n.s.p.f., lithopone, oxide, sulfate, sulfide, gross weight	metric tons	176,000 <sup>r</sup>	283,000 <sup>r</sup>	155,000	342,000
Ores and concentrates, Zn content	do.	383,000	183,000	271,000	170,000
Rolled	do.	2,050	8,250	2,160	12,700
Slab, refined	do.	895,000 <sup>r</sup>	2,180,000 <sup>r</sup>	758,000	2,400,000
<b>Zirconium and hafnium:</b>					
Hafnium, unwrought, including powders	do.	4	701	4	951
<b>Zirconium:</b>					
Ferrozirconium	do.	197	506	400	1,070
Ores and concentrates	do.	36,200	28,600	20,000	17,400
Oxide, includes germanium oxides and zirconium oxides	do.	2,820	39,100	3,740	57,700
Unwrought powder	do.	213	4,990	263	6,190
Waste and scrap	do.	535	45,700	521	52,500
<b>Total</b>		<b>XX</b>	<b>60,200,000<sup>r</sup></b>	<b>XX</b>	<b>63,400,000</b>
<b>Industrial minerals:</b>					
<b>Abrasives, manufactured:</b>					
Aluminum oxide, crude, ground and refined	do.	209,000	99,800	237,000	118,000
Metallic abrasives	do.	19,600	14,400	22,400	17,400
Silicon carbide, crude, ground and refined	do.	185,000	121,000	164,000	135,000

See footnotes at end of table.

TABLE 8—Continued  
 U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	
<b>Industrial minerals—Continued:</b>					
Asbestos:					
Chrysotile and other unspecified type	metric tons	2,230	1,000	1,730	819
Products with basis of asbestos, cellulose, or other minerals		NA	598,000 <sup>r</sup>	NA	37,200
Barite:					
Chemicals; chloride, oxide, hydroxide, peroxide, nitrate, precipitated carbonate	metric tons	12,500	16,300	7,040	10,000
Crude	do.	2,530,000	145,000	2,540,000	178,000
Ground	do.	815	139 <sup>r</sup>	35,500	3,230
Other sulfates	do.	22,400	15,300	15,900	12,700
Boron minerals and compounds:					
Borax		2	701	1	647
Boric acid		85	34,900	67	27,500
Colemanite		25	7,260	26	7,640
Ulexite		131	39,200	92	27,600
Bromine:					
Compounds, contained bromine	metric tons	42,200 <sup>r</sup>	76,800 <sup>r</sup>	27,900	69,700
Elemental	do.	807	1,340	2,270	3,440
Cement, hydraulic and clinker		35,600 <sup>r</sup>	1,830,000 <sup>r</sup>	22,500	1,310,000
Clays:					
China clay or kaolin		303	55,600	194	48,500
Fire clay		(4)	168	2	584
Decolorizing earths and fuller's earth		3	223	--	--
Bentonite		13	3,100	11	2,390
Common blue clay and other ball clay		1	233	--	--
Other clay		5	3,650	--	--
Chamotte or dina's earth		(4)	18	--	--
Artificially activated clay and activated earth		21	16,200	23	22,400
Diamond, industrial:					
Diamond stones, natural and miners'	thousand carats	2,140	27,400	3,060	35,300
Powder, dust and grit, natural and synthetic	do.	371,000	80,500	411,000	76,400
Diatomite	metric tons	4,480	1,300	3,570	1,540
Feldspar and nepheline syenite:					
Feldspar	do.	5,180	549	3,570	642
Nepheline syenite	do.	426,000	36,000	391,000	38,900
Fluorspar:					
Aluminum fluoride	do.	7,950	8,090	27,600	33,300
Cryolite	do.	3,960	3,870	4,470	4,200
Fluorspar	do.	553,000	112,000	620,000	111,000
Hydrofluoric acid, HF	do.	156,000	168,000	152,000	174,000
Garnet, industrial <sup>c</sup>		51	8,340	52	8,010
Gemstones		XX	18,300,000	XX	20,100,000
Graphite:					
Natural	metric tons	52,600	29,100	58,600	37,300
Electric furnace electrodes	do.	98,200	208,000	97,600	257,000
Gypsum:					
Crude		11,400	130,000	9,390	105,000
Plasters		12	5,010	14	6,700
Boards		994	206,000	438	85,200
Other		XX	60,400	XX	42,200
Iodine:					
Crude	metric tons	5,640	109,000	6,060	128,000
Potassium iodide	do.	619 <sup>r</sup>	12,000	649	13,500
Iron oxide pigments:					
Natural	do.	6,270	2,890	4,460	2,310
Synthetic	do.	193,000	156,000	173,000	152,000
Kyanite, andalusite, sillimanite	do.	4,350	1,580	1,760	646
Lime		298	36,300	375	46,100

See footnotes at end of table.

TABLE 8—Continued

U.S. IMPORTS FOR CONSUMPTION OF PRINCIPAL MINERALS AND PRODUCTS, EXCLUDING MINERAL FUELS<sup>1,2</sup>

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral or product	2006		2007		
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	
Industrial minerals—Continued:					
Lithium chemicals:					
Carbonate	metric tons	16,500	38,200	14,600	50,600
Hydroxide	do.	999 <sup>r</sup>	6,040	1,310	8,050
Magnesium compounds:					
Compounds, chlorides, hydroxide, peroxide, sulfates	do.	107,000	35,900	92,200	33,900
Magnesite, crude and processed:					
Caustic-calcined magnesia	do.	163,000	23,900	134,000	20,100
Dead-burned and fused magnesia	do.	433,000	108,000	437,000	125,000
Other magnesia	do.	19,000	11,100	20,900	11,500
Crude	do.	15,200	2,550	9,000	2,220
Mica:					
Scrap and flake:					
Powder	do.	27,400	11,000	26,500	11,300
Waste	do.	17,800 <sup>r</sup>	3,930 <sup>r</sup>	14,600	3,860
Sheet:					
Unworked, excludes unworked sheet mica valued at less than \$1 per kilogram	do.	355	256	114	217
Worked	do.	1,420	18,200 <sup>r</sup>	1,840	14,500
Nitrogen, major compounds, gross weight		16,200	4,560,000 <sup>r</sup>	19,800	6,180,000
Peat moss	metric tons	924,000	223,000	977,000	240,000
Perlite, processed crude	do.	245,000	10,500	229,000	12,200
Phosphate rock and phosphatic materials		2,620	229,000	3,430	291,000
Potash, chloride, sulfate, nitrate, sodium nitrate mixtures	metric tons	7,380,000	1,150,000	8,190,000	1,310,000
Pumice:					
Crude or unmanufactured		108 <sup>r</sup>	3,810 <sup>r</sup>	35	2,490
Wholly or partially manufactured		1	2,800 <sup>r</sup>	2	2,150
Salt		9,490	163,000	8,640	171,000
Sand and gravel:					
Construction		4,960	94,100	4,420	87,700
Industrial		855	21,000	511	24,000
Silica, special stone products		NA	8,100	NA	9,000
Soda ash		7	2,290	9	2,760
Stone:					
Crushed, chips, calcium carbonate fines, excludes precipitated carbonates		19,800	206,000	19,500	212,000
Dimension		NA	2,500,000	NA	2,540,000
Strontium:					
Carbonate	metric tons	13,200	6,440	11,300	6,480
Celestite	do.	1,530	98	1,230	83
Metal	do.	617	1,820	454	1,430
Nitrate	do.	1,020	883	3,170	3,280
Oxide, hydroxide, peroxide	do.	16	52	86	122
Sulfur:					
Elemental		2,950 <sup>e</sup>	70,400	2,930 <sup>e</sup>	79,400
Sulfuric acid, 100% H <sub>2</sub> SO <sub>4</sub>	metric tons	2,430,000	90,100	2,610,000	118,000
Talc, unmanufactured		314	66,700	221	64,100
Vermiculite <sup>e</sup>		65	10,600	51	8,810
Wollastonite <sup>e</sup>	metric tons	2,500	313	2,000	250
Zeolites <sup>e</sup>	do.	250	50	350	70
Total		XX	32,500,000 <sup>r</sup>	XX	35,200,000
Grand total		XX	92,700,000 <sup>r</sup>	XX	98,500,000

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. XX Not applicable. -- Zero.<sup>1</sup>Table includes data available through January 26, 2010.<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.<sup>3</sup>Customs value.<sup>4</sup>Less than ½ unit.

TABLE 9  
WORLD AND U.S. PRODUCTION OF SELECTED NONFUEL MINERAL COMMODITIES<sup>1</sup>

(Thousand metric tons unless otherwise specified)

Mineral or product		World total					United States	
		2003	2004	2005	2006	2007	2007	Percentage of world total
<b>Metals:</b>								
Alumina		58,100 <sup>r</sup>	61,300 <sup>r</sup>	64,000 <sup>r</sup>	70,900 <sup>r</sup>	76,100	3,890	5.1
Aluminum <sup>2</sup>		28,000	29,900	31,900	33,900 <sup>r</sup>	37,900	2,550	6.7
Antimony	metric tons	116,000 <sup>r</sup>	142,000 <sup>r</sup>	171,000 <sup>r</sup>	173,000 <sup>r</sup>	170,000	--	--
Arsenic trioxide <sup>3</sup>	do.	69,700 <sup>r</sup>	57,800 <sup>r</sup>	60,000 <sup>r</sup>	61,200 <sup>r</sup>	55,900	--	--
Bauxite <sup>3,4,5</sup>		153,000	164,000 <sup>r</sup>	179,000 <sup>r</sup>	190,000 <sup>r</sup>	199,000	NA	NA
Beryl <sup>3</sup>	metric tons	2,680	2,760	3,440	4,480	4,470	3,810	85.2
Bismuth, refinery	do.	8,700	15,200	13,900 <sup>r</sup>	15,300 <sup>r</sup>	15,000	--	--
Cadmium, refinery	do.	18,400 <sup>r</sup>	18,700 <sup>r</sup>	20,200 <sup>r</sup>	19,900 <sup>r</sup>	20,400	735	3.6
Chromite <sup>3</sup>		15,500	17,800 <sup>r</sup>	18,900 <sup>r</sup>	19,000 <sup>r</sup>	21,500	--	--
<b>Cobalt, Co content:</b>								
Mine	metric tons	52,900 <sup>r</sup>	58,600 <sup>r</sup>	63,400 <sup>r</sup>	65,900 <sup>r</sup>	65,500	--	--
Refinery	do.	43,200 <sup>r</sup>	48,500 <sup>r</sup>	54,100 <sup>r</sup>	53,800 <sup>r</sup>	53,500	--	--
<b>Copper:</b>								
Mine		13,800	14,700	15,000	15,100	15,400	1,170	7.6
Smelter		12,600 <sup>r</sup>	12,900	13,500 <sup>r</sup>	14,100	14,300	617	4.3
Refinery		15,300	15,900 <sup>r</sup>	16,600	17,300 <sup>r</sup>	18,000	1,310	7.3
Gold	kilograms	2,540,000 <sup>r</sup>	2,420,000 <sup>r</sup>	2,480,000 <sup>r</sup>	2,370,000 <sup>r</sup>	2,340,000	238,000	10.2
Indium, refinery	metric tons	371 <sup>r</sup>	392 <sup>r</sup>	493 <sup>r</sup>	578 <sup>r</sup>	553	--	--
Iron ore <sup>3</sup>		1,210,000	1,360,000	1,540,000	1,820,000 <sup>r</sup>	2,030,000	52,500	2.6
<b>Iron and steel:</b>								
Direct-reduced iron <sup>2</sup>		46,800 <sup>r</sup>	52,700 <sup>r</sup>	56,200 <sup>r</sup>	58,700 <sup>r</sup>	65,000	250	0.4
Pig iron <sup>2</sup>		673,000 <sup>r</sup>	720,000 <sup>r</sup>	802,000 <sup>r</sup>	883,000 <sup>r</sup>	947,000	36,300	3.8
Raw steel		974,000	1,060,000	1,140,000	1,250,000 <sup>r</sup>	1,340,000	98,100	7.3
<b>Lead:</b>								
Mine, Pb content	metric tons	3,200,000 <sup>r</sup>	3,200,000 <sup>r</sup>	3,520,000 <sup>r</sup>	3,650,000 <sup>r</sup>	3,750,000	434,000	11.6
Refinery	do.	6,990,000 <sup>r</sup>	7,070,000 <sup>r</sup>	7,640,000 <sup>r</sup>	7,890,000 <sup>r</sup>	8,280,000	1,300,000	15.7
Magnesium <sup>5</sup>	do.	509	595	622	675 <sup>r</sup>	748	W	NA
Manganese ore <sup>3</sup>		24,200	27,900	31,000 <sup>r</sup>	32,800 <sup>r</sup>	35,700	--	--
Mercury <sup>5</sup>	metric tons	1,730 <sup>r</sup>	1,900 <sup>r</sup>	1,520 <sup>r</sup>	1,150 <sup>r</sup>	1,170	NA <sup>6</sup>	NA
Molybdenum, Mo content	do.	131,000	159,000	186,000	187,000 <sup>r</sup>	209,000	57,000 <sup>7</sup>	27.3
<b>Nickel, Ni content:</b>								
Mine	do.	1,330,000 <sup>r</sup>	1,360,000 <sup>r</sup>	1,460,000 <sup>r</sup>	1,560,000 <sup>r</sup>	1,660,000	--	--
Refinery	do.	1,220,000 <sup>r</sup>	1,260,000 <sup>r</sup>	1,290,000 <sup>r</sup>	1,320,000 <sup>r</sup>	1,340,000	--	--
Niobium (columbium)-tantalum concentrates <sup>3</sup>	do.	178,800 <sup>r</sup>	184,700 <sup>r</sup>	263,900 <sup>r</sup>	222,600 <sup>r</sup>	261,700	--	--
Platinum-group metals	kilograms	466,000	481,000	504,000 <sup>r</sup>	513,000 <sup>r</sup>	509,000	16,700	3.3
Rhenium	do.	38,300 <sup>r</sup>	42,100 <sup>r</sup>	49,100 <sup>r</sup>	47,200	51,100	7,090	13.9
Selenium <sup>2,5</sup>	do.	1,570,000 <sup>r</sup>	1,440,000 <sup>r</sup>	1,340,000 <sup>r</sup>	1,440,000 <sup>r</sup>	1,470,000	W	NA
Silver	metric tons	18,800	19,900	20,800 <sup>r</sup>	20,400 <sup>r</sup>	21,100	1,280	6.1
Tellurium <sup>2,5</sup>	kilograms	95,200 <sup>r</sup>	109,700 <sup>r</sup>	66,500 <sup>r</sup>	68,300 <sup>r</sup>	41,000	W	NA
<b>Tin:</b>								
Mine	metric tons	261,000 <sup>r</sup>	304,000 <sup>r</sup>	305,000 <sup>r</sup>	296,000 <sup>r</sup>	326,000	--	--
Smelter <sup>8</sup>	do.	282,000	306,000 <sup>r</sup>	344,000	351,000 <sup>r</sup>	358,000	11,900	3.3
Tungsten, W content	do.	47,200 <sup>r</sup>	66,600 <sup>r</sup>	60,000 <sup>r</sup>	56,600 <sup>r</sup>	54,500	W	NA
Vanadium	do.	47,900	51,900	56,400	57,900 <sup>r</sup>	59,100	--	--
<b>Zinc:</b>								
Mine, Zn content of concentrate and direct shipping ore		9,530 <sup>r</sup>	9,600 <sup>r</sup>	9,930	10,300 <sup>r</sup>	10,900	803	7.4
Smelter		10,100 <sup>r</sup>	10,600 <sup>r</sup>	10,400	10,800 <sup>r</sup>	11,500	278	2.4
<b>Industrial minerals:</b>								
Asbestos	metric tons	2,400,000 <sup>r</sup>	2,330,000 <sup>r</sup>	2,250,000 <sup>r</sup>	2,180,000 <sup>r</sup>	2,200,000	--	--
Barite	do.	6,730,000 <sup>r</sup>	7,680,000 <sup>r</sup>	7,760,000 <sup>r</sup>	7,900,000 <sup>r</sup>	7,670,000	455,000 <sup>9</sup>	5.9
Boron minerals	do.	4,750,000 <sup>r</sup>	4,960,000 <sup>r</sup>	4,840,000 <sup>r</sup>	3,580,000 <sup>r</sup>	3,840,000	W	NA

See footnotes at end of table.



TABLE 9—Continued  
WORLD AND U.S. PRODUCTION OF SELECTED NONFUEL MINERAL COMMODITIES<sup>1</sup>

(Thousand metric tons unless otherwise specified)

Mineral or product		World total					United States	
		2003	2004	2005	2006	2007	2007	Percentage of world total
<b>Industrial minerals—Continued:</b>								
Bromine	metric tons	494,000 <sup>r</sup>	565,000 <sup>r</sup>	631,000 <sup>r</sup>	643,000 <sup>r</sup>	387,000	W <sup>9</sup>	NA
Celesite	do.	492,000 <sup>r</sup>	508,000 <sup>r</sup>	551,000 <sup>r</sup>	529,000 <sup>r</sup>	539,000	--	--
Cement, hydraulic		2,030,000	2,190,000	2,350,000	2,600,000 <sup>r</sup>	2,770,000	96,800 <sup>10</sup>	3.5
<b>Clays:</b>								
Bentonite		10,300	11,600 <sup>r</sup>	11,700 <sup>r</sup>	11,800 <sup>r</sup>	11,900	4,820	40.6
Fuller's earth	metric tons	4,740,000 <sup>r</sup>	4,670,000 <sup>r</sup>	4,030,000 <sup>r</sup>	3,750,000 <sup>r</sup>	3,890,000	2,660,000	68.4
Kaolin		38,000 <sup>r</sup>	38,300 <sup>r</sup>	38,600 <sup>r</sup>	38,300 <sup>r</sup>	39,000	7,110	18.2
<b>Diamond:</b>								
Natural	isand carats	158,000	165,000 <sup>r</sup>	183,000 <sup>r</sup>	174,000 <sup>r</sup>	169,000	--	--
Synthetic	do.	543,000	559,000	563,000	566,000	568,000	260,000	45.8
Diatomite	metric tons	1,970,000 <sup>r</sup>	1,970,000 <sup>r</sup>	2,030,000 <sup>r</sup>	2,220,000 <sup>r</sup>	2,100,000	687,000 <sup>9</sup>	32.8
Feldspar		13,600 <sup>r</sup>	15,100 <sup>r</sup>	16,200 <sup>r</sup>	17,600 <sup>r</sup>	18,100	730	4.1
Fluorspar	metric tons	4,850,000 <sup>r</sup>	5,230,000 <sup>r</sup>	5,390,000 <sup>r</sup>	5,690,000 <sup>r</sup>	5,690,000	--	--
Graphite, natural	do.	1,000,000 <sup>r</sup>	1,020,000 <sup>r</sup>	1,040,000 <sup>r</sup>	1,020,000 <sup>r</sup>	1,110,000	--	--
Gypsum		135,000 <sup>r</sup>	144,000 <sup>r</sup>	145,000 <sup>r</sup>	149,000 <sup>r</sup>	153,000	17,900	11.7
Iodine, crude	metric tons	24,600	24,800	26,500	26,700 <sup>r</sup>	25,700	W	NA
Iron oxide pigments	do.	810,000 <sup>r</sup>	796,000 <sup>r</sup>	854,000 <sup>r</sup>	773,000 <sup>r</sup>	826,000	W	NA
Kyanite and related minerals	do.	386,000 <sup>r</sup>	456,000 <sup>r</sup>	450,000 <sup>r</sup>	444,000 <sup>r</sup>	443,000	130,000 <sup>11</sup>	29.4
Lime		236,000	249,000	258,000 <sup>r</sup>	271,000	281,000	20,200 <sup>9,1c</sup>	7.2
Lithium	metric tons	256,000 <sup>r</sup>	262,000 <sup>r</sup>	344,000 <sup>r</sup>	395,000 <sup>r</sup>	381,000	W	NA
Magnesite, crude <sup>5</sup>		14,100 <sup>r</sup>	16,500 <sup>r</sup>	15,100 <sup>r</sup>	15,000 <sup>r</sup>	15,200	W	NA
Mica, including scrap and flake <sup>12</sup>	metric tons	354,000 <sup>r</sup>	391,000 <sup>r</sup>	357,000 <sup>r</sup>	397,000 <sup>r</sup>	381,000	96,600	25.4
Monazite <sup>13</sup>	do.	5,800	7,400 <sup>r</sup>	6,300 <sup>r</sup>	6,900 <sup>r</sup>	7,000	--	--
Nitrogen, N content of ammonia		110,000	117,000	123,000 <sup>r</sup>	126,000 <sup>r</sup>	131,000	8,840 <sup>14</sup>	6.7
Peat		33,700 <sup>r</sup>	25,500 <sup>r</sup>	25,700	25,800	25,700	635 <sup>15</sup>	2.5
Perlite	metric tons	1,800,000 <sup>r</sup>	1,870,000 <sup>r</sup>	1,770,000 <sup>r</sup>	1,790,000 <sup>r</sup>	1,760,000	409,000 <sup>9</sup>	23.2
Phosphate rock <sup>3</sup>		138,000 <sup>r</sup>	143,000	150,000 <sup>r</sup>	151,000 <sup>r</sup>	156,000	29,700	19.0
Potash, K <sub>2</sub> O equivalent		29,900 <sup>r</sup>	32,100 <sup>r</sup>	33,800 <sup>r</sup>	31,400 <sup>r</sup>	34,600	1,100	3.2
Pumice		15,800 <sup>r</sup>	17,700 <sup>r</sup>	17,300 <sup>r</sup>	17,200 <sup>r</sup>	16,700	1,270 <sup>9</sup>	7.6
Rare earths	metric tons	97,100	102,000	122,000 <sup>r</sup>	137,000 <sup>r</sup>	124,000	--	--
Salt		225,000 <sup>r</sup>	236,000 <sup>r</sup>	250,000 <sup>r</sup>	262,000 <sup>r</sup>	257,000	44,500	17.3
Sand and gravel, industrial, silica		117,000 <sup>r</sup>	120,000 <sup>r</sup>	125,000 <sup>r</sup>	123,000 <sup>r</sup>	126,000	30,000 <sup>9</sup>	23.8
Soda ash, natural and manufactured		37,100 <sup>r</sup>	39,700 <sup>r</sup>	41,200 <sup>r</sup>	42,500 <sup>r</sup>	44,800	11,100 <sup>16</sup>	24.7
Sulfur, all forms		64,100 <sup>r</sup>	66,200 <sup>r</sup>	67,000 <sup>r</sup>	66,900 <sup>r</sup>	68,400	9,090	13.3
Talc and pyrophyllite <sup>17</sup>	metric tons	7,800,000 <sup>r</sup>	7,840,000 <sup>r</sup>	7,950,000 <sup>r</sup>	7,750,000 <sup>r</sup>	7,620,000	769,000	10.1
<b>Titanium concentrates:<sup>3</sup></b>								
Ilmenite and leucoxene	do.	5,950,000 <sup>r</sup>	6,150,000 <sup>r</sup>	6,330,000 <sup>r</sup>	7,070,000 <sup>r</sup>	7,180,000	400,000 <sup>18</sup>	5.6
Rutile <sup>5</sup>	do.	384,000 <sup>r</sup>	354,000 <sup>r</sup>	374,000 <sup>r</sup>	512,000 <sup>r</sup>	594,000	(19)	NA
Vermiculite	do.	491,000 <sup>r</sup>	513,000 <sup>r</sup>	521,000 <sup>r</sup>	512,000 <sup>r</sup>	508,000	100,000	19.7
Zirconium	do.	1,040,000 <sup>r</sup>	1,090,000 <sup>r</sup>	1,100,000 <sup>r</sup>	1,250,000 <sup>r</sup>	1,420,000	W	NA

<sup>r</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; not included in "World total." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Primary.

<sup>3</sup>Gross weight.

<sup>4</sup>Individual country figures that are included in the world total represent dried bauxite equivalent of crude ore, but for some countries available data are insufficient to permit this adjustment.

<sup>5</sup>"World total" for years listed does not include U.S. production.

<sup>6</sup>U.S. production of mercury is byproduct only.

<sup>7</sup>Listed in Molybdenum chapter (table 1) as production.

<sup>8</sup>Includes tin content of alloys made directly from ore.

<sup>9</sup>Quantity sold or used by producers.

TABLE 9—Continued  
WORLD AND U.S. PRODUCTION OF SELECTED NONFUEL MINERAL COMMODITIES<sup>1</sup>

---

<sup>10</sup>Includes Puerto Rico.

<sup>11</sup>Includes synthetic mullite.

<sup>12</sup>Excludes, if any, U.S. production of low-quality sericite and sheet mica.

<sup>13</sup>Monazite totals are rounded to two significant digits.

<sup>14</sup>Synthetic anhydrous ammonia; excludes coke oven byproduct ammonia.

<sup>15</sup>Horticultural use.

<sup>16</sup>U.S. production is natural only.

<sup>17</sup>Data for the United States exclude proprietary pyrophyllite production.

<sup>18</sup>Includes rutile to avoid disclosing company proprietary data. Rounded to one significant digit.

<sup>19</sup>Included with ilmenite to avoid disclosing company proprietary data; not included in "Total."