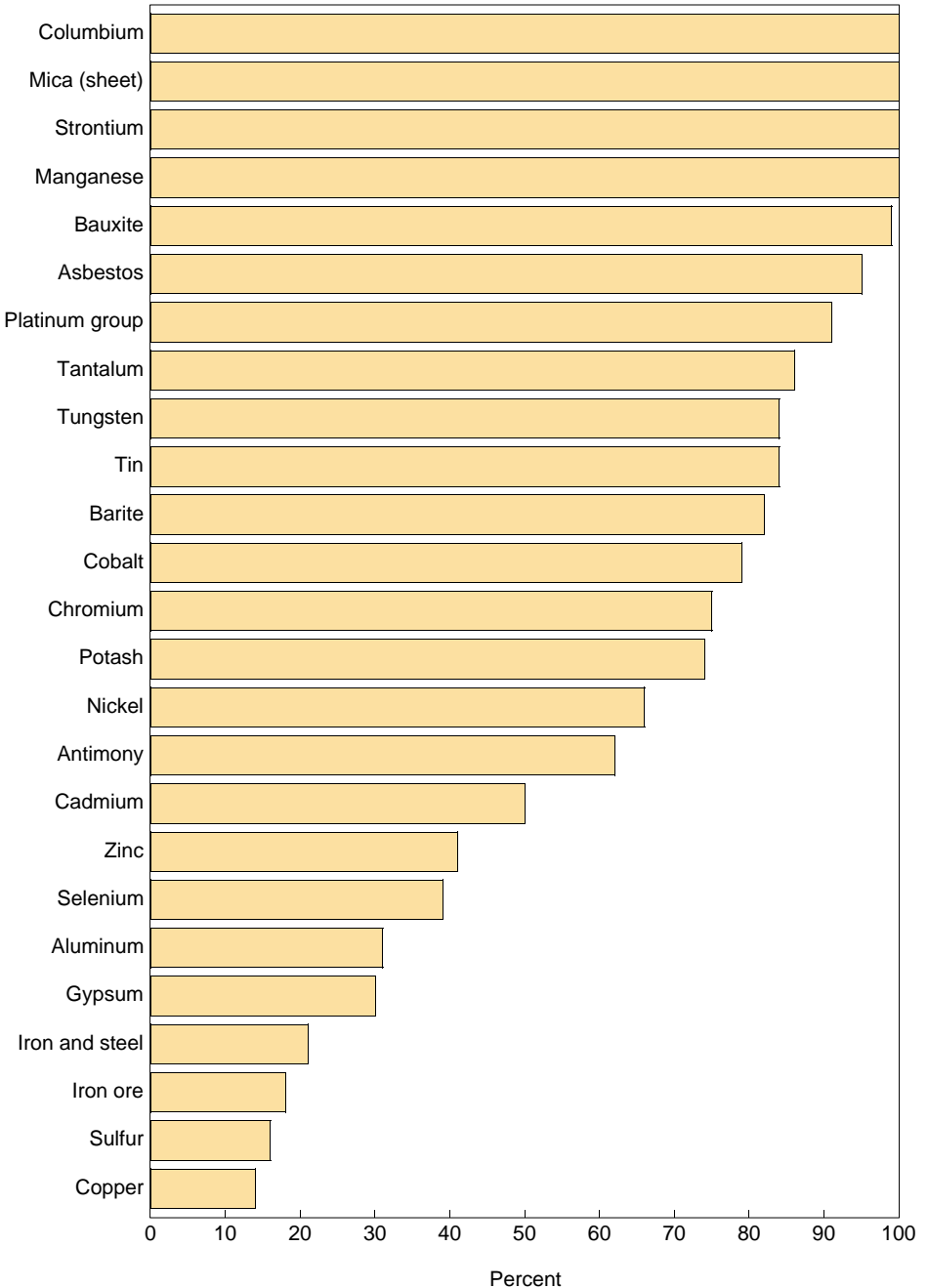


Figure 24.1

### Net U.S. Imports of Selected Minerals and Metals as a Percent of Apparent Consumption: 1994



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1154.

# Natural Resources

This section presents data on the area, ownership, production, trade, reserves, and disposition of natural resources. Natural resources is defined here as including forestry, fisheries, and mining and mineral products.

**Forestry**—Presents data on the area, ownership, and timber resource of commercial timberland; forestry statistics covering the National Forests and Forest Service cooperative programs; product data for lumber, pulpwood, woodpulp, paper and paperboard, and similar data.

The principal sources of data relating to forests and forest products are *An Analysis of the Timber Situation in the United States, 1989-2040, 1990, Forest Resources of the United States, 1992, 1993; U.S. Timber Production, Trade, Consumption, and Price Statistics; Land Areas of the National Forest System*, issued annually by the Forest Service of the Department of Agriculture; *Agricultural Statistics* issued by the Department of Agriculture; and reports of the census of manufactures (taken every 5 years) and the annual *Current Industrial Reports*, issued by the Bureau of the Census. Additional information is published in the monthly *Survey of Current Business* of the Bureau of Economic Analysis; and the annual *Wood Pulp and Fiber Statistics* and *The Statistics of Paper, Paperboard, and Wood Pulp* of the American Forest and Paper Association, Washington, DC.

The completeness and reliability of statistics on forests and forest products vary considerably. The data for forest land area and stand volumes are much more reliable for areas which have been recently surveyed than for those for which only estimates are available. In general, more data are available for lumber and other manufactured products such as particle board and softwood panels, etc., than for the primary forest products such as poles and piling and fuelwood.

**Fisheries**—The principal source of data relating to fisheries is *Fisheries of the United States*, issued annually by the National Marine Fisheries Service

## In Brief

Petroleum balance, 1994:

	Barrels
<i>Products supplied</i>	6.5 billion
<i>Net imports</i>	2.5 billion
<i>Stocks</i>	1.7 billion

(NMFS), National Oceanic and Atmospheric Administration (NOAA).

The NMFS collects and disseminates data on commercial landings of fish and shellfish. Annual reports include quantity and value of commercial landings of fish and shellfish disposition of landings, number of fishermen, and number and kinds of fishing vessels and fishing gear. Reports for the fish-processing industry include annual output for the wholesaling and fish processing establishments, annual and seasonal employment. The Magnuson Fishery Conservation and Management Act of 1976 (Magnuson Act), Public Law 94-265 as amended, provides for the conservation and management of all fishery resources within the U.S. Exclusive Economic Zone (EEZ), and gives the Federal Government exclusive authority over domestic and foreign fisheries within 200 nautical miles of U.S. shores and over certain living marine resources beyond the EEZ. Within the EEZ, the total allowable level of foreign fishing, if any, is that portion of the "optimum yield" not harvested by U.S. vessels. Adjustments in the "optimum yield" level may occur periodically. For details, see *Fisheries of the United States, 1993*. The NMFS collects and disseminates data on catches by foreign fishing vessels in the EEZ.

**Mining and mineral products**—Presents data relating to mineral industries and their products, general summary measures of production and employment, and more detailed data on production, prices, imports and exports, consumption, and distribution for specific industries and products. Data on mining

and mineral products may also be found in sections 26 and 30 of this *Abstract*; data on mining employment may be found in section 13.

Mining comprises the extraction of minerals occurring naturally (coal, ores, crude petroleum, natural gas) and quarrying, well operation, milling, refining and processing and other preparation customarily done at the mine or well site or as a part of extraction activity. (Mineral preparation plants are usually operated together with mines or quarries.) Exploration for minerals is included as is the development of mineral properties.

The principal governmental sources of these data are the *Minerals Yearbook*, published by the U.S. Geological Survey, Department of the Interior, and various monthly and annual publications of the Energy Information Administration, Department of Energy. See text, section 19, for list of Department of Energy publications. In addition, the Bureau of the Census conducts a census of mineral industries every 5 years. Nongovernment sources include the *Annual Statistical Report* of the American Iron and Steel Institute, Washington, DC; *Metals Week* and the monthly *Engineering and Mining Journal*, issued by the McGraw-Hill Publishing Co., New York, NY; *The Iron Age*, issued weekly by the Chilton Co., Philadelphia, PA; and the *Joint Association Survey* of the U.S. Oil and Gas Industry, conducted jointly by the American Petroleum Institute, Independent Petroleum Association of America, and Mid-Continent Oil and Gas Association.

Mineral statistics, with principal emphasis on commodity detail, have been collected by the U.S. Geological Survey since 1880. Current data in U.S. Geological Survey publications include quantity and value of nonfuel minerals produced, sold or used

by producers, or shipped; quantity of minerals stocked; crude materials treated and prepared minerals recovered; and consumption of mineral raw materials. The U.S. Mine Safety and Health Administration also collects and publishes data on workhours, employment, accidents, and injuries in the mineral industries, except petroleum and natural gas. In October 1977, mineral fuel data collection activities of the U.S. Geological Survey were transferred to the Energy Information Administration.

Censuses of mineral industries have been conducted by the Bureau of the Census at various intervals since 1840. Beginning with the 1967 census, legislation provides for a census to be conducted every 5 years for years ending in "2" and "7." The censuses provide, for the various types of mineral establishments, information on operating costs, capital expenditures, labor, equipment, and energy requirements in relation to their value of shipments and other receipts. Commodity statistics on many manufactured mineral products are also collected by the Bureau at monthly, quarterly, or annual intervals and issued in its *Current Industrial Reports* series.

In general, figures shown in the individual commodity tables include data for outlying areas and may therefore not agree with summary tables. Except for crude petroleum and refined products, the export and import figures include foreign trade passing through the customs districts of United States and Puerto Rico, but exclude shipments between U.S. territories and the customs districts.

**Historical statistics**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

**No. 1121. National Forest System—Summary: 1970 to 1993**

[For fiscal years ending in year shown; see text, section 9. Includes Alaska and Puerto Rico, except as noted. See *Historical Statistics, Colonial Times to 1970*, series J 33-34, for similar grazing data, and L 15-31]

ITEM	Unit	1970	1980	1985	1988	1989	1990	1991	1992	1993
Timber cut, total value . . . . .	Mil. dol	309	737	725	1,243	1,313	1,191	1,012	938	918
Commercial and cost sales: <sup>1</sup>										
Volume . . . . .	Mil. bd.	11,527	9,178	10,941	12,649	11,951	10,500	8,475	7,290	5,917
Value . . . . .	Mil. dol	308	730	721	1,240	1,310	1,188	1,009	935	914.6
Free use:										
Volume . . . . .	Mil. bd.	179	2,070	399	223	214	151	121	80	80
Value <sup>2</sup> . . . . .	Mil. dol	0.3	5.7	2.2	1.2	1.2	1.0	1.0	0.8	0.8
Misc. forest products:										
Value . . . . .	Mil. dol	0.7	1.1	1.7	2.0	2.2	2.6	2.7	2.7	2.8
Livestock grazing: <sup>3</sup>										
Cattle and horses <sup>4</sup> . . . . .	1,000	1,607	1,521	1,565	1,313	1,526	1,236	1,265	1,216	(NA)
Sheep and goats . . . . .	1,000	2,105	1,328	1,183	1,067	972	958	1,029	1,017	(NA)
Roads and trails:										
Road construction <sup>5</sup> . . . . .	Miles . .	942	925	1,903	1,352	866	857	910	853	816
Trail construction <sup>5 6</sup> . . . . .	Miles . .	278	2,419	987	1,834	1,944	1,635	1,921	1,976	1976
Receipts, total . . . . .	Mil. dol	300	703	636	980	1,051	971	772	614	503
Timber use . . . . .	Mil. dol	284	625	515	888	910	849	667	520	425
Grazing use . . . . .	Mil. dol	4	16	9	9	11	10	11	11	11
Special land use, etc. <sup>7</sup> . . . . .	Mil. dol	11	62	112	83	130	112	93	84	67
Payments to local govt. <sup>8</sup>	Mil. dol	73	240	229	325	368	368	335	322	323
25-percent fund <sup>8</sup> . . . . .	Mil. dol	72	234	212	317	354	358	327	(NA)	(NA)
Other <sup>9</sup> . . . . .	Mil. dol	1	7	17	8	15	10	8	(NA)	(NA)
Allotments to Forest Service <sup>10</sup>	Mil. dol	30	73	60	104	111	106	88	(NA)	(NA)
Roads and trails . . . . .	Mil. dol	29	65	55	92	96	91	73	(NA)	(NA)
Other . . . . .	Mil. dol	1	8	5	12	15	14	16	(NA)	(NA)

NA Not available. <sup>1</sup> Includes land exchanges. <sup>2</sup> Includes some free use timber not reducible to board feet. <sup>3</sup> For 1970, data for livestock permitted to graze; thereafter, for number actually grazed. Calendar-year data, prior to 1980. Excludes Puerto Rico. <sup>4</sup> Excludes animals under 6 months of age. 1970 includes swine. Beginning 1980, includes burros. <sup>5</sup> Includes reconstruction. <sup>6</sup> Beginning 1980, includes work accomplished by Human Resource Programs and volunteers. <sup>7</sup> Payments made in following year. <sup>8</sup> Includes Tongass Alaska suspense account. <sup>9</sup> Includes Arizona and New Mexico School Fund (through 1980), State of Minnesota, and receipts paid to counties under Bankhead-Jones Farm Tenant Act. <sup>10</sup> For use in following year.

Source: U.S. Forest Service. In *Agricultural Statistics*, annual; and unpublished data.

**No. 1122. Forest and Timberland Area, Sawtimber and Stock: 1970 to 1992**

[As of Jan. 1]

YEAR AND REGION	Total forest land (mil. acres)	TIMBERLAND, OWNERSHIP <sup>1</sup>				SAWTIMBER, NET VOLUME <sup>3</sup>		GROWING STOCK, NET VOLUME <sup>4</sup>	
		All ownerships (mil. acres)	Federally owned or managed <sup>2</sup> (mil. acres)	State, county, and municipal (mil. acres)	Private (mil. acres)	Total (bil. bd. ft.)	Softwood (bil. bd. ft.)	Total (bil. cu. ft.)	Softwood (bil. cu. ft.)
United States, 1970 . . . . .	754	504	116	29	360	2,587	2,035	694	458
North . . . . .	(NA)	154	11	18	126	295	81	146	39
South . . . . .	(NA)	203	15	3	185	569	302	191	87
Rocky Mountains . . . . .	(NA)	65	42	2	20	398	384	101	95
Pacific Coast . . . . .	(NA)	82	47	5	29	1,325	1,268	257	238
United States, 1987 . . . . .	731	485	97	34	354	2,853	2,040	766	453
North . . . . .	165	154	11	19	124	459	126	190	48
South . . . . .	203	197	16	4	177	781	388	245	106
Rocky Mountains . . . . .	142	61	39	3	20	411	394	108	100
Pacific Coast . . . . .	220	72	31	8	32	1,202	1,132	223	199
United States, 1992 . . . . .	737	490	97	35	358	2,992	2,047	786	450
North . . . . .	168	158	11	19	127	540	137	207	51
South . . . . .	212	199	16	4	179	842	389	251	103
Rocky Mountains . . . . .	140	63	40	3	20	415	397	110	101
Pacific Coast . . . . .	217	70	30	8	32	1,196	1,124	218	195

NA Not available. <sup>1</sup> Timberland is forest land that is producing or is capable of crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation. Areas qualifying as timberland have the capability of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included. <sup>2</sup> Includes Indian lands. <sup>3</sup> Sawtimber is timber suitable for sawing into lumber. Live trees of commercial species containing at least one 12-foot sawlog or two noncontiguous 8-foot logs, and meeting regional specifications for freedom from defect. Softwood trees must be at least 9.0-inches diameter, and hardwood trees must be at least 11.0-inches diameter at 4 1/2 feet above ground. International 1/4-inch rule. <sup>4</sup> Live trees of commercial species meeting specified standards of quality or vigor. Cull trees are excluded. Includes only trees 5.0-inches diameter or larger at 4 1/2 feet above ground.

Source: U.S. Forest Service, *Forest Resources of the United States, 1992*.

### No. 1123. National Forest System Land—States and Other Areas: 1990 and 1992

[In thousands of acres. As of Sept. 30. See also *Historical Statistics, Colonial Times to 1970*, series L 10-11]

STATE	GROSS AREA WITHIN UNIT BOUNDARIES <sup>1</sup>		NATIONAL FOREST SYSTEM LAND <sup>2</sup>		OTHER LANDS WITHIN UNIT BOUNDARIES	
	1990	1992	1990	1992	1990	1992
<b>United States . . . . .</b>	<b>231,443</b>	<b>231,502</b>	<b>191,324</b>	<b>191,453</b>	<b>40,119</b>	<b>40,049</b>
Alabama . . . . .	1,280	1,288	658	659	622	629
Alaska . . . . .	24,345	24,345	22,220	22,193	2,126	2,152
Arizona . . . . .	11,880	11,887	11,239	11,247	642	641
Arkansas . . . . .	3,490	3,490	2,509	2,529	981	961
California . . . . .	24,401	24,401	20,619	20,616	3,782	3,785
Colorado . . . . .	16,039	16,037	14,462	14,467	1,577	1,570
Connecticut . . . . .	-	(Z)	-	(Z)	-	-
Delaware . . . . .	-	-	-	-	-	-
Florida . . . . .	1,246	1,254	1,128	1,135	118	119
Georgia . . . . .	1,846	1,846	859	860	987	986
Hawaii . . . . .	-	(Z)	-	(Z)	-	-
Idaho . . . . .	21,674	21,674	20,438	20,441	1,236	1,233
Illinois . . . . .	840	840	266	268	573	572
Indiana . . . . .	644	644	188	189	456	455
Iowa . . . . .	-	-	-	-	-	-
Kansas . . . . .	116	116	108	108	8	8
Kentucky . . . . .	2,102	2,102	670	673	1,431	1,428
Louisiana . . . . .	1,022	1,022	601	601	422	421
Maine . . . . .	93	93	53	53	40	40
Maryland . . . . .	-	-	-	-	-	-
Massachusetts . . . . .	-	-	-	-	-	-
Michigan . . . . .	4,885	4,895	2,816	2,849	2,069	2,046
Minnesota . . . . .	5,467	5,467	2,810	2,815	2,657	2,652
Mississippi . . . . .	2,310	2,310	1,150	1,153	1,160	1,157
Missouri . . . . .	3,082	3,082	1,475	1,478	1,606	1,603
Montana . . . . .	19,101	19,102	16,806	16,806	2,295	2,296
Nebraska . . . . .	442	442	352	352	90	90
Nevada . . . . .	6,275	6,275	5,797	5,801	478	474
New Hampshire . . . . .	825	825	720	721	105	104
New Jersey . . . . .	-	-	-	-	-	-
New Mexico . . . . .	10,367	10,367	9,321	9,321	1,046	1,045
New York . . . . .	13	13	13	13	-	-
North Carolina . . . . .	3,165	3,165	1,232	1,234	1,934	1,932
North Dakota . . . . .	1,106	1,106	1,106	1,106	-	(Z)
Ohio . . . . .	833	833	203	212	630	622
Oklahoma . . . . .	461	465	297	301	165	164
Oregon . . . . .	17,502	17,504	15,651	15,655	1,851	1,849
Pennsylvania . . . . .	744	744	513	513	231	231
Rhode Island . . . . .	-	-	-	-	-	-
South Carolina . . . . .	1,376	1,376	607	609	768	767
South Dakota . . . . .	2,344	2,352	1,996	2,013	349	339
Tennessee . . . . .	1,212	1,212	628	628	585	585
Texas . . . . .	1,994	1,994	753	755	1,241	1,240
Utah . . . . .	9,186	9,186	8,099	8,099	1,087	1,087
Vermont . . . . .	815	816	340	345	475	471
Virginia . . . . .	3,223	3,223	1,645	1,648	1,578	1,575
Washington . . . . .	10,050	10,061	9,151	9,160	899	901
West Virginia . . . . .	1,863	1,863	1,025	1,025	838	838
Wisconsin . . . . .	2,023	2,023	1,517	1,518	506	505
Wyoming . . . . .	9,704	9,704	9,255	9,255	449	449

- Represents zero. Z Less than half the unit of measure. <sup>1</sup> Comprises all publicly and privately owned land within authorized boundaries of national forests, purchase units, national grasslands, Land utilization projects, research and experimental areas, and other areas. <sup>2</sup> Federally owned land within the "gross area within unit boundaries."

Source: U.S. Forest Service, *Land Areas of the National Forest System*, annual.

## No. 1124. Public Lands—Disposal: 1980 to 1993

[For fiscal year ending in year shown: see text, section 9. Period figures are totals, not annual averages.  
See also *Historical Statistics, Colonial Times to 1970*, series J 10-15 and J 28-32]

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992	1993
Applications, entries, and selections allowed <sup>1</sup>	1,000 acres	1,167	1,404	1	1	1	7	1	1	-
Applications, entries, and selections approved <sup>1</sup>	1,000 acres	175	6,491	1,812	1,387	579	238	436	1,219	819
Patents and certificates <sup>1</sup>	1,000 acres	2,495	4,217	3,000	5,419	780	1,052	476	1,585	1,460
Mineral class, total	Number	106,125	119,419	89,789	82,585	83,762	81,355	83,358	72,337	59,631
Leases	Number	105,963	119,101	89,546	82,450	83,656	81,248	83,259	72,192	59,523
Permits <sup>2</sup>	Number	132	316	231	121	96	96	88	121	84
Licenses	Number	30	2	12	14	10	11	11	24	24
Grazing Leases <sup>3</sup>	Number	7,700	7,387	7,164	7,197	7,263	7,105	7,185	7,036	6,994
Permits <sup>4</sup>	Number	14,741	12,493	12,368	12,537	12,362	12,153	12,312	12,128	12,069

- Represents or rounds to zero. <sup>1</sup> Excludes Indian fee and reissue trust and corrective patents. <sup>2</sup> Excludes free-use permits for disposition of mineral materials. <sup>3</sup> Beginning 1985, as of September 30. <sup>4</sup> Licenses and permits within grazing districts.

Source: U. S. Bureau of Land Management, *Public Land Statistics*, annual.

## No. 1125. Timber-Based Industries—Summary of Manufactures: 1991 and 1992

[Data based on 1987 *Standard Industrial Classification Manual*, published by the Office of Management and Budget, see text, section 26. N.e.c. = Not elsewhere classified]

INDUSTRY	SIC <sup>1</sup> code	1991			1992		
		All employees		Value of shipments (bil. dol.)	All employees		Value of shipments (bil. dol.)
		Number (1,000)	Payroll (mil. dol.)		Number (1,000)	Payroll (mil. dol.)	
Logging and sawmills	241/242	207.6	4,307	28.9	221.7	4,739	31.3
Millwork and veneer <sup>2</sup>	243	209.9	4,487	21.4	224.6	5,027	24.9
Wood containers	244	39.8	634	2.9	40.0	639	2.9
Wood buildings, mobile homes	245	54.1	1,106	6.0	56.2	1,230	6.6
Miscellaneous wood products	249	90.9	1,706	9.5	84.9	1,740	10.3
Pulp mills	261	16.8	697	5.3	15.9	688	5.5
Paper mills	262	130.3	5,224	33.3	130.7	5,425	32.8
Paperboard mills	263	50.6	2,027	15.0	51.5	2,135	16.1
Paperboard containers and boxes	265	198.6	5,392	30.6	199.0	5,710	32.6
Converted paper and paperboard products <sup>3</sup>	267	224.3	6,043	44.6	229.2	6,521	46.0

<sup>1</sup> Standard Industrial Classification code; see text, section 13. <sup>2</sup> Includes plywood and structural members. <sup>3</sup> Except containers and boxes.

Source: U.S. Bureau of the Census, *Census of Manufactures, 1992 Final Industry Series*, MC87-I-24A-D and MC87-I-26A-C, and *Annual Survey of Manufactures*.

## No. 1126. Timber Products—Production, Foreign Trade, and Consumption, by Type of Product: 1970 to 1988

[In millions of cubic feet, roundwood equivalent. See also *Historical Statistics, Colonial Times to 1970*, series L 72-97]

ITEM	Unit	1970	1975	1980	1983	1984	1985	1986	1987	1988, prel.
Industrial roundwood:										
Domestic production	Mil. cu. ft.	11,105	10,575	12,120	12,065	12,725	12,515	13,845	14,670	14,985
Imports	Mil. cu. ft.	2,430	2,215	3,250	3,710	4,165	4,340	4,375	4,575	4,445
Exports	Mil. cu. ft.	1,540	1,685	2,350	2,110	2,060	2,070	2,300	2,650	3,200
Consumption	Mil. cu. ft.	11,995	11,105	13,020	13,665	14,830	14,785	15,920	16,595	16,230
Lumber:										
Domestic production	Mil. cu. ft.	5,215	4,890	5,300	5,370	5,770	5,665	6,545	6,990	6,920
Plywood and veneer:										
Domestic production	Mil. cu. ft.	1,020	1,165	1,175	1,365	1,400	1,420	1,505	1,650	1,630
Pulp products:										
Domestic production	Mil. cu. ft.	3,835	3,485	4,390	4,165	4,355	4,165	4,545	4,670	4,885
Logs:										
Imports	Mil. cu. ft.	25	15	25	30	30	20	15	15	15
Pulpwood chips, exports	Mil. cu. ft.	145	195	275	155	145	145	150	160	215
Fuelwood consumption	Mil. cu. ft.	540	570	3,105	3,235	3,620	3,450	3,115	3,150	3,160
Timber products, per capita	Cu. ft.	61.1	54.0	70.8	72.0	77.9	76.2	78.8	81.0	79.5
Industrial roundwood	Cu. ft.	58.5	51.4	57.2	58.2	62.6	61.8	65.9	68.0	65.9
Fuelwood	Cu. ft.	2.6	2.6	13.6	13.8	15.3	14.4	12.9	12.9	13.6
Lumber	Bd. ft.	193.0	171.0	188.0	190.0	205.0	207.0	224.0	233.0	221.0
Plywood and veneer	Bd. ft.	34.0	32.0	30.0	34.0	34.0	35.0	37.0	39.0	37.0
Pulp products	Cords (128 cu. ft.)	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1960-88*, annual.

### No. 1127. Selected Species—Stumpage Prices In Current and Constant (1982) Dollars: 1980 to 1993

[In dollars per 1,000 board feet. Stumpage prices are based on sales of sawtimber from National Forests. See also *Historical Statistics, Colonial Times to 1970*, series L 199-205]

SPECIES	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>CURRENT DOLLARS</b>												
Softwoods:												
Douglas fir <sup>1</sup>	432	162	133	126	161	190	256	390	466	395	477	318
Southern pine <sup>2</sup>	155	141	139	91	104	136	142	131	127	166	198	217
Sugar pine <sup>3</sup>	667	138	84	110	170	288	260	289	285	241	492	598
Ponderosa pine <sup>3,4</sup>	206	104	123	101	157	209	182	292	252	238	292	535
Western hemlock <sup>5</sup>	213	62	62	51	75	105	163	223	203	164	165	364
Hardwoods:												
All eastern hardwoods <sup>6</sup>	52	60	90	65	70	88	151	136	146	160	167	264
Oak, white, red, and black <sup>6</sup>	66	88	145	95	108	147	146	179	188	164	211	195
Maple, sugar <sup>7</sup>	70	55	81	70	66	81	108	129	135	121	145	220
<b>CONSTANT (1982) DOLLARS<sup>8</sup></b>												
Softwoods:												
Douglas fir <sup>1</sup>	481	160	128	122	160	185	240	347	401	339	407	270
Southern pine <sup>2</sup>	173	139	134	88	103	132	133	117	109	143	169	184
Sugar pine <sup>3</sup>	742	136	81	106	169	280	244	258	245	207	419	508
Ponderosa pine <sup>3,4</sup>	230	103	118	98	156	204	170	260	217	204	249	455
Western hemlock <sup>5</sup>	237	61	60	49	75	103	152	199	175	141	140	309
Hardwoods:												
All eastern hardwoods <sup>6</sup>	58	59	87	63	70	86	142	121	126	137	142	224
Oak, white, red, and black <sup>6</sup>	73	87	140	92	108	143	137	159	162	140	180	166
Maple, sugar <sup>7</sup>	78	54	78	68	66	78	101	115	116	104	123	187

<sup>1</sup> Western Washington and western Oregon. <sup>2</sup> Southern region. <sup>3</sup> Pacific Southwest region (formerly California region). <sup>4</sup> Includes Jeffrey pine. <sup>5</sup> Pacific Northwest region. <sup>6</sup> Eastern and Southern regions. <sup>7</sup> Eastern region. <sup>8</sup> Deflated by the producer price index, all commodities.

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics*, annual.

### No. 1128. Lumber Consumption, by Species Group and End Use: 1970 to 1992

[In million board feet, except per capita in board feet. Per capita consumption based on estimated resident population as of July 1]

ITEM	1970	1986	1991	1992	END-USE				
					1970	1976	1986	1991	
Total	39.9	57.0	54.8	56.0	New housing	13.3	17.0	19.3	15.0
Per capita	194	237	217	219	Residential upkeep and improvements	4.7	5.7	10.1	11.6
					New nonresidential construction	4.7	4.5	5.3	5.4
Species group:					Manufacturing	4.7	4.9	4.8	5.6
Softwoods	32.0	48.0	44.0	45.7	Shipping	5.7	5.9	6.8	8.2
Hardwoods	7.9	9.0	10.8	10.3	Other <sup>2</sup>	6.8	6.7	10.9	8.8

<sup>1</sup> In addition to new construction, includes railroad ties laid as replacements in existing track and lumber used by railroads for railcar repair. <sup>2</sup> Includes upkeep and improvement of nonresidential buildings and structures; made-at-home projects, such as furniture, boats, and picnic tables; made-on-the-job items such as advertising and display structures; and miscellaneous products and uses.

Source: U.S. Forest Service. *The 1993 RPA Timber Assessment Update*, forthcoming.

### No. 1129. Selected Timber Products—Producer Price Indexes: 1980 to 1994

[See also *Historical Statistics, Colonial Times to 1970*, series L 206-210]

PRODUCT	Unit	1980	1985	1990	1992	1993	1994
Lumber and wood products, except furniture	Dec. 1984=100	(NA)	100.3	117.0	129.7	148.3	154.4
Logging camps and logging contractors	Dec. 1981=100	(NA)	94.8	135.6	151.3	186.4	192.6
Sawmills and planing mills	Dec. 1984=100	(NA)	99.7	113.7	131.3	161.8	165.2
Millwork, veneer, and plywood	Dec. 1984=100	(NA)	99.9	115.4	128.4	142.8	148.7
Softwood plywood	Dec. 1980=100	(NA)	91.4	90.0	102.5	124.2	145.4
Wood containers	June 1985=100	(NA)	(NA)	113.9	123.5	141.7	147.4
Wood buildings and mobile homes	Dec. 1984=100	(NA)	100.6	115.5	121.5	129.5	139.8
Particleboard	Dec. 1982=100	(NA)	92.1	110.0	117.1	120.7	138.6
Paper and allied products	Dec. 1984=100	(NA)	98.8	121.9	121.2	120.2	123.2
Pulp mills	Dec. 1982=100	(NA)	105.5	100.9	153.8	118.5	105.8
Paper mill products: except building paper	June 1981=100	(NA)	93.5	109.5	134.0	126.6	126.4
Paperboard mills	Dec. 1982=100	(NA)	97.3	112.0	146.0	142.6	138.3
Converted paper and paperboard products <sup>2</sup>	June 1993=100	(NA)	(NA)	(NA)	(NA)	(NA)	100.6
Paperboard containers and boxes	Dec. 1984=100	(NA)	98.4	117.7	118.5	118.0	123.7

NA Not available. <sup>1</sup> Includes structural wood members. <sup>2</sup> Excludes containers and boxes.

Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly.

### No. 1130. Paper and Paperboard—Production, New Supply, and Ratio of New Supply to Real GDP: 1990 to 1993

[In thousands of short tons. See also *Historical Statistics, Colonial Times to 1970*, series L 172, L 174, and L 178-191]

ITEM	PRODUCTION				NEW SUPPLY				RATIO OF NEW SUPPLY TO REAL GDP <sup>1</sup>			
	1990	1991	1992	1993	1990	1991	1992	1993	1990	1991	1992	1993
Total paper . . . . .	39,361	39,084	40,973	41,745	49,494	47,379	49,424	51,244	10.106	9.734	9.926	9.980
Total paperboard . . . . .	39,423	40,416	41,985	43,213	36,406	36,826	38,543	40,045	7.434	7.566	7.741	7.799
Unbleached Kraft . . . . .	20,357	20,950	21,658	21,447	17,780	17,794	18,515	18,456	3.631	3.656	3.718	3.595
Semichemical . . . . .	5,640	5,552	5,762	5,672	5,609	5,482	5,730	5,774	1.145	1.126	1.151	1.125
Bleached Kraft . . . . .	4,399	4,572	4,503	4,583	3,638	3,781	3,690	3,788	0.743	0.777	0.741	0.738
Recycled . . . . .	9,026	9,332	10,063	11,510	9,378	9,768	10,608	12,026	1.915	2.007	2.130	2.342

<sup>1</sup> GDP = Gross domestic product.

Source: American Forest and Paper Association, Washington, DC, *Monthly Statistical Summary of Paper, Paperboard and Woodpulp*.

### No. 1131. Newsprint—Production, Stocks, Consumption, and Price Index: 1970 to 1992

[In thousands of metric tons, except price index. See also *Historical Statistics, Colonial Times to 1970*, series L 192-198]

COUNTRY AND ITEM	1970	1980	1985	1987	1988	1989	1990	1991	1992
Canada: Production . . . . .	7,808	8,625	8,890	9,630	9,840	9,640	9,068	8,977	8,931
Shipments from mills . . . . .	7,795	8,622	8,899	9,718	9,740	9,606	9,074	8,728	9,143
Stocks at mills, end of year . . . . .	236	165	288	189	288	321	315	564	351
United States: Consumption, estimate . . . . .	6,468	10,088	11,507	12,303	12,245	12,241	12,125	11,381	11,634
Production . . . . .	3,142	4,239	4,924	5,300	5,427	5,523	5,997	6,206	6,424
Shipments from mills . . . . .	3,136	4,234	4,927	5,310	5,415	5,515	6,007	6,152	6,464
Stocks, end of year: At mills . . . . .	33	21	57	36	48	56	46	98	59
At and in transit to publishers . . . . .	749	732	910	900	932	749	801	932	938
Producer price index (1982=100) . . . . .	34.1	188.5	105.3	112.3	127.6	122.5	119.5	120.9	109.9

<sup>1</sup> Average for 11 months.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, monthly. Data from American Forest and Paper Association, Washington, DC, and Canadian Pulp & Paper Association.

### No. 1132. Selected Timber Products—Imports and Exports: 1970 to 1993

ITEM	Unit	1970	1980	1985	1988	1989	1990	1991	1992	1993, prel.
<b>IMPORTS<sup>1</sup></b>										
Lumber, total <sup>2</sup> . . . . .	Mil. bd. ft. . .	6,114	9,866	14,996	14,226	15,277	12,159	11,756	13,474	15,625
From Canada . . . . .	Percent . . . . .	96.0	97.5	97.6	97.5	91.3	98.5	98.3	98.3	97.6
Softwoods . . . . .	Mil. bd. ft. . .	5,778	9,573	14,632	13,841	14,928	11,927	11,545	13,214	15,260
Hardwoods . . . . .	Mil. bd. ft. . .	337	293	364	386	349	232	210	260	335
Logs, total . . . . .	Mil. bd. ft. <sup>3</sup> . .	144	128	99	68	42	28	15	46	94
From Canada . . . . .	Percent . . . . .	79.6	97.4	81.8	91.9	61.5	67.5	74.5	88.9	77.7
Softwoods . . . . .	Mil. bd. ft. <sup>3</sup> . .	107	114	71	56	24	18	9	40	86
Hardwoods . . . . .	Mil. bd. ft. <sup>3</sup> . .	38	13	28	12	18	10	6	7	8
Paper and board <sup>4</sup> . . . . .	1,000 tons . .	7,115	8,780	11,522	13,110	13,100	13,148	12,167	12,543	13,971
Woodpulp . . . . .	1,000 tons . .	3,518	4,051	4,466	4,938	5,105	4,893	4,997	5,029	5,413
Plywood . . . . .	Mil. sq. ft. <sup>5</sup> . .	2,049	1,235	1,817	1,698	1,955	1,687	1,457	1,776	1,798
<b>EXPORTS</b>										
Lumber, total <sup>2</sup> . . . . .	Mil. bd. ft. . .	1,243	2,494	1,945	4,527	4,243	3,802	3,997	3,603	3,385
To: Canada . . . . .	Percent . . . . .	21.7	25.3	23.7	17.6	15.6	18.1	15.1	17.3	17.4
Japan . . . . .	Percent . . . . .	30.8	26.0	32.1	34.5	38.1	33.5	30.5	30.9	36.3
Europe . . . . .	Percent . . . . .	24.1	23.8	15.1	20.5	16.6	19.1	19.6	21.2	15.9
Softwoods . . . . .	Mil. bd. ft. . .	1,115	2,007	1,518	3,266	3,379	2,941	3,055	2,613	2,376
Hardwoods . . . . .	Mil. bd. ft. . .	128	487	427	1,261	863	861	942	990	1,008
Logs, total . . . . .	Mil. bd. ft. <sup>3</sup> . .	2,741	3,261	3,843	4,798	4,745	4,262	3,816	3,316	2,877
To: Canada . . . . .	Percent . . . . .	10.6	9.7	11.6	7.9	5.8	9.3	11.2	12.6	13.6
Japan . . . . .	Percent . . . . .	86.3	78.0	49.4	50.3	63.5	62.5	56.7	62.1	65.4
China: Mainland . . . . .	Percent . . . . .	(NA)	2.7	27.8	23.4	9.6	8.5	9.7	7.1	4.6
Softwoods . . . . .	Mil. bd. ft. <sup>3</sup> . .	2,672	3,109	3,732	4,594	4,532	4,044	3,532	3,092	2,640
Hardwoods . . . . .	Mil. bd. ft. <sup>3</sup> . .	69	152	111	204	214	218	283	224	237
Paper and board <sup>4</sup> . . . . .	1,000 tons . .	2,817	5,214	4,071	5,691	6,300	6,796	8,331	8,971	9,126
Woodpulp . . . . .	1,000 tons . .	3,095	3,806	3,796	5,528	6,231	5,906	6,337	7,222	6,499
Plywood . . . . .	Mil. sq. ft. <sup>5</sup> . .	172	413	358	1,093	1,562	1,767	1,552	1,759	1,648

NA Not available. <sup>1</sup> Customs value of imports; see text, section 28. <sup>2</sup> Includes railroad ties. <sup>3</sup> Log scale. <sup>4</sup> Includes paper and board products. Excludes hardboard. <sup>5</sup> 3/8 inch basis.

Source: U.S. Foreign Agricultural Service, unpublished data. Trade, Consumption, and Price Statistics: 1960-89, forthcoming.



### No. 1133. Fishery Products—Domestic Catch and Imports, Summary: 1970 to 1993

[Live weight, in millions of pounds, except percent. 1979-1993 preliminary. For data on commercial catch for selected countries, see table 1361, section 30. See *Historical Statistics, Colonial Times to 1970*, series L 224-226, for domestic catch]

ITEM	1970	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Total</b> . . . . .	<b>11,474</b>	<b>11,357</b>	<b>12,552</b>	<b>15,150</b>	<b>14,368</b>	<b>15,744</b>	<b>14,628</b>	<b>15,485</b>	<b>16,349</b>	<b>16,364</b>	<b>16,106</b>	<b>20,334</b>
For human food . . . . .	6,213	8,006	8,498	9,337	9,620	10,561	10,505	12,268	12,662	13,020	13,242	13,821
For industrial use . . . . .	5,261	3,351	4,054	5,813	4,748	5,183	4,123	3,217	3,687	3,344	2,864	6,513
<b>Domestic catch</b> . . . . .	<b>4,917</b>	<b>6,482</b>	<b>6,438</b>	<b>6,258</b>	<b>6,031</b>	<b>6,896</b>	<b>7,192</b>	<b>8,463</b>	<b>9,404</b>	<b>9,484</b>	<b>9,637</b>	<b>10,467</b>
For human food . . . . .	2,537	3,654	3,320	3,294	3,393	3,946	4,588	6,204	7,041	7,031	7,618	8,214
For industrial use . . . . .	2,380	2,828	3,118	2,964	2,638	2,950	2,604	2,259	2,363	2,453	2,019	2,253
<b>Imports</b> <sup>2</sup> . . . . .	<b>6,557</b>	<b>4,875</b>	<b>6,114</b>	<b>8,892</b>	<b>8,337</b>	<b>8,848</b>	<b>7,436</b>	<b>7,022</b>	<b>6,945</b>	<b>6,879</b>	<b>6,469</b>	<b>9,867</b>
For human food . . . . .	3,676	4,352	5,178	6,043	6,227	6,615	5,917	6,064	5,621	5,989	5,624	5,607
For industrial use <sup>3</sup> . . . . .	2,881	523	936	2,849	2,110	2,233	1,519	958	1,324	890	845	4,260
<b>Disposition</b> . . . . .	<b>4,917</b>	<b>6,482</b>	<b>6,438</b>	<b>6,258</b>	<b>6,031</b>	<b>6,896</b>	<b>7,192</b>	<b>8,463</b>	<b>9,404</b>	<b>9,484</b>	<b>9,637</b>	<b>10,467</b>
Fresh and frozen . . . . .	1,595	2,621	2,336	2,242	2,487	3,157	3,813	5,585	6,501	6,541	7,288	7,744
Canned . . . . .	1,150	1,161	1,128	1,232	1,134	1,009	1,017	798	751	674	543	649
Reduced . . . . .	71	96	82	70	60	89	86	128	126	119	100	115
Reduced to meal, oil, etc. . . . .	2,101	2,604	2,892	2,714	2,350	2,641	2,276	1,952	2,026	2,150	1,696	1,959

<sup>1</sup> For univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.), the weight of meats, excluding the shell, is reported. <sup>2</sup> Excludes imports of edible fishery products consumed in Puerto Rico; includes landings of tuna caught by foreign vessels in American Samoa. <sup>3</sup> Fish meal and sea herring.

### No. 1134. Fisheries—Quantity and Value of Domestic Catch: 1970 to 1993

[1979-1993 preliminary. See also *Historical Statistics, Colonial Times to 1970*, series L 224-226, L 229, and L 310]

YEAR	QUANTITY (mil. lb. <sup>1</sup> )			Value (mil. dol.)	Average price per lb. (cents)	YEAR	QUANTITY (mil. lb. <sup>1</sup> )			Value (mil. dol.)	Average price per lb. (cents)
	Total	For human food	For industrial products <sup>2</sup>				Total	For human food	For industrial products <sup>2</sup>		
1970 . . . . .	4,917	2,537	2,380	613	12.5	1986 . . . . .	6,031	3,393	2,638	2,763	45.8
1975 . . . . .	4,877	2,465	2,412	977	20.0	1987 . . . . .	6,896	3,946	2,950	3,115	45.2
1980 . . . . .	6,482	3,654	2,828	2,237	34.5	1988 . . . . .	7,192	4,588	2,604	3,520	48.9
1981 . . . . .	5,977	3,547	2,430	2,388	40.0	1989 . . . . .	8,463	6,204	2,259	3,238	38.30
1982 . . . . .	6,367	3,285	3,082	2,390	37.5	1990 . . . . .	9,404	7,041	2,363	3,522	37.50
1983 . . . . .	6,439	3,238	3,201	2,355	36.6	1991 . . . . .	9,484	7,031	2,453	3,308	34.90
1984 . . . . .	6,438	3,320	3,118	2,350	36.5	1992 . . . . .	9,637	7,618	2,019	3,678	38.19
1985 . . . . .	6,258	3,294	2,964	2,326	37.2	1993 . . . . .	10,467	8,214	2,253	3,471	33.2

<sup>1</sup> Live weight. <sup>2</sup> Meal, oil, fish solubles, homogenized condensed fish, shell products, bait, and animal food.

### No. 1135. Domestic Fish and Shellfish Catch and Value, by Species: 1985 to 1993

SPECIES	QUANTITY (1,000 lb.)				VALUE (\$1,000)		
	1988-92 5-year average	1985	1990	1993	1985	1990	1993
<b>Total</b> . . . . .	(X)	<b>6,257,642</b>	<b>9,403,571</b>	<b>10,466,895</b>	<b>2,326,237</b>	<b>3,521,995</b>	<b>3,471,460</b>
<b>Fish, total</b> <sup>1</sup> . . . . .	(X)	<b>5,214,363</b>	<b>8,091,068</b>	<b>8,999,142</b>	<b>1,193,427</b>	<b>1,900,097</b>	<b>1,884,121</b>
Cod: Atlantic . . . . .		80,859	82,823	95,881	50,503	61,329	44,956
Pacific . . . . .		453,996	120,275	526,396	482,799	18,556	116,172
Flounder . . . . .		347,282	195,718	254,519	599,180	112,921	135,598
Herring, sea; Atlantic . . . . .		104,642	57,133	113,095	109,645	2,968	6,511
Herring, sea; Pacific . . . . .		128,219	142,074	108,120	106,572	47,025	32,178
Menhaden . . . . .		1,931,671	2,739,401	1,962,160	1,983,319	100,680	93,896
Pollock, Alaska . . . . .		2,506,943	92,833	3,108,031	3,257,990	5,409	268,344
Salmon . . . . .		724,855	726,946	733,146	888,134	439,795	612,367
<b>Shellfish, total</b> <sup>1</sup> . . . . .	(X)	<b>1,043,279</b>	<b>1,312,503</b>	<b>1,467,753</b>	<b>1,132,810</b>	<b>1,621,898</b>	<b>1,587,339</b>
Clams . . . . .		137,159	150,551	139,198	147,752	128,349	138,030
Crabs . . . . .		537,548	337,632	499,416	604,437	203,044	483,837
Lobsters: American . . . . .		56,353	46,152	61,017	56,513	114,895	154,677
Oysters . . . . .		31,805	44,173	29,193	33,575	70,053	93,718
Scallops: Calico . . . . .		19,583	12,513	(NA)	(NA)	1,281	(NA)
Sea . . . . .		35,412	15,829	39,917	18,116	74,562	153,696
Shrimp . . . . .		337,347	333,691	346,494	292,887	472,850	491,433
Squid: Atlantic . . . . .		65,250	7,157	59,809	90,809	7,256	21,178
Pacific . . . . .		55,219	22,276	36,082	71,550	4,047	2,636

NA Not available. X Not applicable. <sup>1</sup> Includes other types of fish and shellfish, not shown separately. Source of tables 1133-1135: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

**No. 1136. U.S. Private Aquaculture—Trout and Catfish Production and Value: 1988 to 1994**

[Periods are from Sept. 1 of the previous year to Aug. 31 of stated year. Data are for foodsize fish, those over 12 inches long]

ITEM	Unit	1988	1989	1990	1991	1992	1993	1994
<b>TROUT</b>								
Number sold . . . . .	Mil . . . . .	70.5	67.4	67.8	67.7	64.5	60.9	58.3
Total weight . . . . .	Mil. lb . . . . .	56.0	55.5	56.8	58.9	55.2	54.6	52.1
Total value of sales . . . . .	Mil. dol . . . . .	57.9	60.0	64.6	58.3	51.0	54.3	52.7
Average price received . . . . .	\$/lb. . . . .	1.03	1.08	1.14	0.99	0.92	0.99	1.01
Average weight . . . . .	Lb . . . . .	0.8	0.8	0.8	0.9	0.9	0.9	0.9
<b>CATFISH</b>								
Fish sold to processors . . . . .	Mil. lb . . . . .	295.1	341.9	360.4	390.9	457.4	459.0	(NA)
Avg. price paid by processors . . . . .	Cents/lb. . . . .	76.4	71.7	75.8	63.1	59.8	71.0	(NA)
Value . . . . .	Mil. dol . . . . .	225.5	245.1	273.2	246.7	273.5	325.9	(NA)
Processor sales . . . . .	Mil. lb . . . . .	149.6	176.3	183.1	199.8	231.3	233.5	(NA)
Avg. price received by processors . . . . .	Cents/lb. . . . .	220.8	211.2	224.0	208.6	200.3	218.7	(NA)
Value . . . . .	Mil. dol . . . . .	330.3	372.3	410.1	416.8	463.3	510.7	(NA)
Inventory (Jan. 1) . . . . .	Mil. lb . . . . .	5.3	8.8	8.1	9.4	9.6	11.6	9.5

NA Not available.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, USDA.

**No. 1137. Supply of Selected Fishery Items: 1980 to 1993**

[In millions of pounds. Totals available for U.S. consumption are supply minus exports plus imports. Round weight is the complete or full weight as caught. Data are preliminary]

ITEM	Unit	1980	1984	1985	1987	1988	1989	1990	1991	1992	1993
Tuna, canned . . . . .	Canned weight . . . . .	666	777	759	866	843	1,028	856	933	922	835
Shrimp . . . . .	Heads-off weight . . . . .	425	584	633	773	767	743	734	744	820	840
Clams . . . . .	Meat weight . . . . .	102	144	164	151	145	150	152	144	155	156
Salmon, canned . . . . .	Canned weight . . . . .	126	150	113	76	59	159	148	131	73	114
American lobster . . . . .	Round weight . . . . .	69	100	108	116	121	85	95	107	95	92
Spiny lobster . . . . .	Round weight . . . . .	127	153	154	151	139	89	89	85	81	76
Scallops . . . . .	Meat weight . . . . .	51	87	72	79	74	79	74	62	69	66
Sardines, canned . . . . .	Canned weight . . . . .	69	58	76	77	63	61	61	52	41	41
Oysters . . . . .	Meat weight . . . . .	71	84	90	92	78	66	56	47	50	48
Crab meat, canned . . . . .	Canned weight . . . . .	9	7	8	8	8	8	9	11	9	9
Snow crab . . . . .	Round weight . . . . .	54	23	45	29	30	58	37	60	88	66
King crab . . . . .	Round weight . . . . .	133	13	11	14	10	18	19	20	15	8

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

**No. 1138. Canned, Fresh, and Frozen Fishery Products: 1980 to 1993**

[Fresh fishery products exclude Alaska and Hawaii. Canned fishery products data are for natural pack only. See also *Historical Statistics, Colonial Times to 1970*, series L 338-357 (production data in cases) and L 358]

PRODUCT	PRODUCTION (mil. lb.)						VALUE (mil. dol.)					
	1980	1985	1990	1991	1992	1993	1980	1985	1990	1991	1992	1993
<b>Canned,<sup>1</sup></b>	<b>1,516</b>	<b>1,161</b>	<b>1,178</b>	<b>1,386</b>	<b>1,343</b>	<b>1,615</b>	<b>1,928</b>	<b>1,360</b>	<b>1,562</b>	<b>1,644</b>	<b>1,577</b>	<b>1,626</b>
Tuna . . . . .	602	545	581	593	609	619	1,144	821	902	877	888	904
Salmon . . . . .	200	159	196	196	152	199	376	228	366	413	293	307
Clam products . . . . .	77	117	110	129	126	116	66	109	76	84	88	90
Mackerel <sup>2</sup> . . . . .	38	15	23	9	5	(NA)	12	7	11	3	2	(NA)
Sardines, Maine . . . . .	20	20	13	14	17	14	32	38	17	19	25	25
Shrimp . . . . .	16	4	1	1	1	1	80	19	3	4	4	4
Crabs . . . . .	5	1	1	(Z)	(Z)	(Z)	19	2	4	(Z)	1	1
Oysters <sup>3</sup> . . . . .	(Z)	2	1	1	(NA)	(Z)	(Z)	2	1	2	(NA)	(Z)
<b>Fish fillets and steaks<sup>4</sup></b>	<b>202</b>	<b>246</b>	<b>441</b>	<b>473</b>	<b>449</b>	<b>409</b>	<b>261</b>	<b>440</b>	<b>843</b>	<b>1,021</b>	<b>912</b>	<b>829</b>
Cod . . . . .	31	57	65	71	65	54	43	89	132	180	158	131
Flounder . . . . .	49	69	54	48	46	35	87	157	154	147	120	100
Haddock . . . . .	17	8	7	8	5	4	29	19	24	30	19	17
Ocean perch, Atlantic . . . . .	7	2	1	1	1	1	9	3	1	1	3	2
Rockfish . . . . .	14	18	33	22	19	18	13	25	53	36	30	28
Pollock, Atlantic . . . . .	9	15	12	8	9	8	9	17	21	18	19	18
Pollock, Alaska . . . . .	(NA)	11	164	152	165	154	(NA)	24	174	206	205	179
Other . . . . .	74	66	105	163	139	135	71	106	284	403	358	354

NA Not available. Z Less than 500,000 pounds or \$500,000. <sup>1</sup> Includes other products, not shown separately. <sup>2</sup> Includes Jack and a small amount of Pacific mackerel. <sup>3</sup> Includes oyster specialties. <sup>4</sup> Fresh and frozen.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

### No. 1139. Gross Domestic Product (GDP) in Mining: 1980 to 1993

[In millions of dollars, except percent. For definition of gross domestic product, see text, section 14. For 1977-87, based on 1972 Standard Industrial Classification (SIC); For 1987, estimates are shown first based on the 1972 SIC and then on the 1987 SIC. Estimates thereafter based on 1987 SIC]

MINING INDUSTRY	1980	1985	1987	1988	1989	1990	1991	1992	1993
<b>Current dollars, total</b> . . . . .	<b>112.6</b>	<b>130.6</b>	<b>83.0</b>	<b>87.9</b>	<b>84.2</b>	<b>103.1</b>	<b>92.0</b>	<b>85.2</b>	<b>89.4</b>
Metal mining . . . . .	4.4	2.5	2.6	4.8	5.2	6.2	6.3	6.3	6.8
Coal mining . . . . .	13.6	13.8	12.5	12.5	12.9	12.7	12.4	13.1	12.3
Oil and gas extraction . . . . .	89.1	108.4	60.8	63.2	58.8	76.9	66.1	58.5	62.7
Nonmetallic minerals, except fuels . . . . .	5.5	5.9	7.2	7.3	7.4	7.2	7.1	7.3	7.6
<b>Constant (1987) dollars, total</b> . . . . .	<b>79.9</b>	<b>83.3</b>	<b>83.0</b>	<b>94.2</b>	<b>83.3</b>	<b>91.8</b>	<b>92.3</b>	<b>89.0</b>	<b>93.1</b>
Metal mining . . . . .	1.6	2.5	2.6	4.3	5.0	6.6	7.7	8.0	8.6
Coal mining . . . . .	10.1	11.3	12.5	13.8	14.8	15.3	15.5	16.7	16.2
Oil and gas extraction . . . . .	61.8	63.2	60.8	69.0	56.2	62.9	62.2	57.2	61.1
Nonmetallic minerals, except fuels . . . . .	6.4	6.3	7.2	7.1	7.3	7.0	6.9	7.1	7.2

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, October 1994.

### No. 1140. Mining and Primary Metal Production Indexes: 1970 to 1994

[1987=100. See also *Historical Statistics, Colonial Times to 1970*, series M 68-71]

INDUSTRY GROUP	1970	1980	1985	1986	1988	1989	1990	1991	1992	1993	1994
<b>Mining</b> . . . . .	<b>100.4</b>	<b>110.0</b>	<b>109.0</b>	<b>101.0</b>	<b>101.3</b>	<b>100.0</b>	<b>102.0</b>	<b>100.2</b>	<b>98.9</b>	<b>98.2</b>	<b>99.8</b>
Coal . . . . .	67.2	90.2	96.3	97.1	103.1	107.0	112.2	108.2	108.2	102.9	112.0
Anthracite . . . . .	274.1	169.6	132.8	120.8	115.6	96.3	103.2	72.7	66.1	(NA)	(NA)
Bituminous . . . . .	66.0	89.7	96.1	96.9	105.0	105.8	113.3	109.4	105.8	(NA)	(NA)
Oil and gas extraction . . . . .	104.8	112.1	111.9	102.0	99.7	96.0	96.8	95.9	93.2	93.0	92.9
Metal mining . . . . .	129.5	108.8	91.3	95.2	120.3	140.5	153.1	153.7	163.8	162.4	159.4
Iron ore . . . . .	194.4	149.4	104.9	84.4	119.4	122.5	117.9	118.3	116.3	115.7	122.5
Nonferrous ores . . . . .	111.5	95.0	86.4	99.1	120.5	144.1	160.2	160.8	173.3	171.7	166.4
Copper ore . . . . .	123.2	93.1	86.9	91.2	113.7	120.0	126.8	131.1	141.9	143.3	145.4
<b>Primary metals, manufacturing</b> . . . . .	<b>115.2</b>	<b>110.8</b>	<b>101.8</b>	<b>93.7</b>	<b>108.7</b>	<b>107.2</b>	<b>106.5</b>	<b>98.7</b>	<b>101.9</b>	<b>106.9</b>	<b>114.5</b>
Nonferrous metals . . . . .	77.1	92.5	98.5	97.3	103.1	101.7	99.5	96.1	97.6	101.0	109.3
Copper . . . . .	135.2	94.7	99.8	99.1	100.1	98.9	102.2	110.0	124.8	135.3	137.5
Aluminum . . . . .	107.8	138.7	104.7	90.9	117.6	120.5	121.0	123.2	120.5	110.5	98.6
Iron and steel . . . . .	148.2	126.0	104.5	90.8	112.7	111.2	111.5	100.5	105.1	111.4	118.3

NA Not available.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

### No. 1141. Summary of Mineral Operations: 1963 to 1992

[Represents mineral operations only. Beginning 1967, excludes single unit establishments without paid employees. See also *Historical Statistics, Colonial Times to 1970*, series M 1-11]

ITEM	Unit	1963	1967	1972	1977	1982	1987	1992
Establishments . . . . .	Number	38,651	28,579	25,269	31,359	42,241	33,617	30,828
With 20 or more employees . . . . .	Number	5,499	5,682	5,312	6,632	(NA)	6,299	5,581
Including all operations in manufactures . . . . .	Number	40,532	29,688	26,178	31,967	42,585	34,041	(NA)
Excluding oil and gas extraction . . . . .	Number	19,290	13,330	11,680	13,520	12,267	10,707	9,951
Employees, total . . . . .	1,000	616	567	595	799	1,114	698	637
Production workers . . . . .	1,000	482	433	443	593	762	451	414
All other . . . . .	1,000	134	134	152	206	352	247	223
Worker-hours, production workers . . . . .	Million	973	892	909	1,183	1,578	942	873
Worker-hours per production workers . . . . .	1,000	2.0	2.1	2.1	2.0	2.1	2.1	2.1
Payroll, total . . . . .	Mil. dol.	3,743	4,187	6,226	13,167	28,637	21,739	24,303
Wages, production workers . . . . .	Mil. dol.	2,680	2,888	4,250	9,082	18,030	12,443	13,874
Salaries, all other employees . . . . .	Mil. dol.	1,063	1,299	1,976	4,085	10,607	9,296	10,429
Cost of supplies, etc. . . . .	Mil. dol.	8,974	10,576	14,884	46,079	109,697	62,423	64,602
Value added in mining . . . . .	Mil. dol.	15,910	19,330	26,471	68,013	188,056	110,959	113,780
Metal mining . . . . .	Mil. dol.	1,418	1,557	2,382	3,504	3,215	4,610	7,180
Coal mining . . . . .	Mil. dol.	1,727	2,091	3,754	11,266	18,631	17,068	17,283
Oil and gas extraction . . . . .	Mil. dol.	11,020	13,994	17,612	48,587	159,937	80,049	79,700
Nonmetallic minerals mining . . . . .	Mil. dol.	1,745	2,288	2,723	4,656	6,273	9,233	9,619
Value of shipments and receipts . . . . .	Mil. dol.	18,804	22,784	36,319	96,375	250,000	157,964	162,339
Capital expenditures . . . . .	Mil. dol.	3,264	4,058	5,036	17,718	47,753	15,418	16,043

NA Not available. <sup>1</sup> See footnote 3, table 1142. <sup>2</sup> Includes purchased machinery installed. <sup>3</sup> See footnote 5, table 1142.

Source: U.S. Bureau of the Census, *Census of Mineral Industries, 1972, 1977, 1982, 1987, and 1992*.

## No. 1142. Mineral Industries—Summary: 1987 and 1992

["N.e.c." means not elsewhere classified. See also *Historical Statistics, Colonial Times to 1970*, series M1-12]

MINERAL INDUSTRY	1987								1992								
	Estab- lish- ments, total	All employees		Production workers <sup>3</sup>		Value added in min- ing <sup>4</sup> (mil. dol.)	Value of ship- ments and re- ceipts <sup>5</sup> (mil. dol.)	Establishments		All employees		Production workers <sup>3</sup>			Value added in min- ing <sup>4</sup> (mil. dol.)	Value of ship- ments and re- ceipts <sup>5</sup> (mil. dol.)	Capital expen- ditures (mil. dol.)
		Num- ber <sup>1</sup> (1,000)	Pay <sup>2</sup> roll (mil. dol.)	Num- ber (1,000)	Wages (mil. dol.)			Total	With 20 or more employ- ees	Num- ber <sup>1</sup> (1,000)	Pay <sup>2</sup> roll (mil. dol.)	Num- ber (1,000)	Hours <sup>6</sup> (mil.)	Wages (mil. dol.)			
<b>All industries . . . . .</b>	<b>33,617</b>	<b>698</b>	<b>21,739</b>	<b>451</b>	<b>12,443</b>	<b>110,959</b>	<b>157,964</b>	<b>30,828</b>	<b>5,581</b>	<b>637</b>	<b>24,303</b>	<b>414</b>	<b>873</b>	<b>13,874</b>	<b>113,780</b>	<b>162,339</b>	<b>16,043</b>
<b>Metal mining . . . . .</b>	<b>1,027</b>	<b>44</b>	<b>1,354</b>	<b>34</b>	<b>952</b>	<b>4,610</b>	<b>6,852</b>	<b>1,063</b>	<b>273</b>	<b>53</b>	<b>2,113</b>	<b>42</b>	<b>89</b>	<b>1,542</b>	<b>7,180</b>	<b>10,327</b>	<b>1,574</b>
Iron ores . . . . .	51	7	224	6	166	768	1,362	40	18	9	348	7	15	274	985	1,715	53
Copper ores . . . . .	61	14	405	11	283	1,301	2,150	62	35	15	550	12	25	405	1,730	2,935	516
Lead and zinc ores . . . . .	39	2	58	1	40	176	268	44	24	3	113	2	5	86	287	472	22
Gold and silver ores . . . . .	372	13	423	10	305	1,814	2,261	428	116	19	827	16	33	601	3,641	4,453	(D)
Ferroalloy ores, except vanadium . . . . .	58	1	46	1	24	61	110	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Metal mining services . . . . .	268	3	81	2	60	176	251	303	38	3	120	3	6	92	263	357	(D)
Miscellaneous metal ores . . . . .	236	5	162	4	99	374	559	186	42	4	155	3	5	84	274	396	58
<b>Coal mining . . . . .</b>	<b>3,905</b>	<b>163</b>	<b>5,567</b>	<b>129</b>	<b>4,251</b>	<b>17,068</b>	<b>25,955</b>	<b>3,086</b>	<b>1,239</b>	<b>134</b>	<b>5,438</b>	<b>108</b>	<b>227</b>	<b>4,197</b>	<b>17,283</b>	<b>26,984</b>	<b>1,899</b>
Bituminous coal and lignite mining . . . . .	3,507	158	5,410	124	4,125	16,679	25,347	2,642	1,155	128	5,247	103	216	4,051	16,792	26,269	1,869
Anthracite mining . . . . .	107	2	41	2	32	109	206	76	19	2	47	1	2	30	97	161	4
Coal mining services . . . . .	291	4	116	3	94	280	402	368	65	5	145	4	9	116	394	554	26
<b>Oil and gas extraction . . . . .</b>	<b>22,910</b>	<b>378</b>	<b>11,961</b>	<b>206</b>	<b>5,283</b>	<b>80,049</b>	<b>112,363</b>	<b>20,877</b>	<b>2,686</b>	<b>344</b>	<b>13,526</b>	<b>187</b>	<b>391</b>	<b>5,992</b>	<b>79,700</b>	<b>111,518</b>	<b>11,423</b>
Crude petroleum and natural gas . . . . .	10,203	199	7,510	69	2,154	67,955	76,518	9,388	1,017	174	8,409	64	131	2,601	66,297	72,298	9,850
Natural gas liquids . . . . .	714	13	433	10	320	4,025	24,750	591	197	13	532	9	18	360	4,246	27,206	619
Oil and gas field services . . . . .	11,993	167	4,018	127	2,809	8,069	11,095	10,898	1,472	157	4,585	114	242	3,031	9,156	12,014	955
Drilling oil and gas wells . . . . .	2,591	55	1,318	46	1,012	2,549	3,626	2,129	450	48	1,371	38	81	982	2,516	3,584	289
Oil, gas exploration services . . . . .	1,917	17	452	13	311	771	1,096	1,489	85	14	462	8	19	238	742	980	182
Oil, gas field services, n.e.c . . . . .	7,485	95	2,248	69	1,486	4,748	6,373	7,280	937	96	2,753	68	143	1,811	5,899	7,451	484
<b>Nonmetallic mining . . . . .</b>	<b>5,775</b>	<b>113</b>	<b>2,858</b>	<b>83</b>	<b>1,956</b>	<b>9,233</b>	<b>12,795</b>	<b>5,802</b>	<b>1,383</b>	<b>106</b>	<b>3,226</b>	<b>77</b>	<b>166</b>	<b>2,144</b>	<b>9,619</b>	<b>13,510</b>	<b>1,147</b>
Dimension stone <sup>7</sup> . . . . .	149	1	25	1	18	65	86	171	17	1	31	1	2	22	79	101	5
Crushed and broken stone <sup>8</sup> . . . . .	2,002	44	1,082	33	754	3,465	4,768	2,142	664	42	1,222	31	68	840	3,670	5,071	430
Sand and gravel <sup>8</sup> . . . . .	2,750	33	772	24	551	2,320	3,139	2,678	440	30	889	21	47	594	2,321	3,160	262
Clay and related minerals <sup>8</sup> . . . . .	197	10	272	7	165	827	1,249	200	100	10	320	8	17	211	935	1,400	87
Chemical and fertilizer minerals . . . . .	148	16	501	12	336	1,999	2,772	156	76	15	564	10	22	347	2,071	3,017	308
Nonmetallic minerals, services . . . . .	177	2	45	1	32	119	165	175	14	2	47	1	3	35	128	170	14
Miscellaneous <sup>9</sup> . . . . .	352	7	162	5	101	438	616	280	72	5	154	4	8	96	415	590	42

Mineral Industries

D Withheld to avoid disclosure. NA Not available. <sup>1</sup> Excludes proprietors and firm members of unincorporated concerns. <sup>2</sup> Gross earnings paid to all employees on payroll. <sup>3</sup> Represents employees up through the working foreman level engaged in manual work. Includes development and exploration workers. <sup>4</sup> Computed by subtracting cost of supplies, minerals received for preparation, purchased fuel and electric energy, contract work, and purchased machinery from the value of shipments and capital expenditures. <sup>5</sup> Represents value of shipments of primary and secondary products of the industry and amount received for services performed for other establishments on a contract, fee, or other basis. <sup>6</sup> Excludes paid vacations, holidays, and sick leave; includes actual overtime hours (not straight-time equivalent). <sup>7</sup> Excludes data for dimension stone quarries operated in conjunction with dressing plants. <sup>8</sup> Excludes data for mining included in establishments classified in manufacturing industries.

Source: U.S. Bureau of the Census, *Census of Mineral Industries: 1987, and 1992*, final industry series reports.

### No. 1143. Mineral Industries—Gross Assets and Capital Expenditures: 1977 to 1992

[In millions of dollars]

INDUSTRY AND YEAR	END OF YEAR GROSS VALUE OF DEPRECIABLE ASSETS					CAPITAL EXPENDITURES					
	Total <sup>1</sup>	Buildings and other structures	Machinery and equipment	Mineral exploration and development <sup>1</sup>	Mineral land and rights <sup>1</sup>	Total <sup>1</sup>	New buildings and other structures	New machinery and equipment	Used buildings and other structures	Used machinery and equipment	Mineral exploration and development <sup>1</sup>
Mineral industries: <sup>2</sup>											
1977 . . . . .	44,664	6,099	33,068	2,625	2,871	6,802	785	5,068	30	399	520
1978 . . . . .	94,613	10,228	73,419	5,036	5,930	13,472	1,229	10,551	78	937	677
1987 . . . . .	84,286	9,314	64,143	5,034	5,795	4,869	349	3,234	88	797	401
1992 . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	6,193	(NA)	(NA)	(NA)	(NA)	(NA)
Crude oil, nat. gas:											
1977 . . . . .	94,414	(NA)	(NA)	(NA)	(NA)	10,916	571	2,269	14	93	7,969
1982 . . . . .	233,052	(NA)	(NA)	(NA)	(NA)	34,281	1,967	5,550	20	215	26,529
1987 . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	10,549	590	3,176	18	218	6,548
1992 . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	9,850	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available. <sup>1</sup> Excludes data for mineral exploration and development, and mineral land and rights portions for mining service industries and natural gas liquids industry. <sup>2</sup> Excludes crude petroleum and natural gas. <sup>3</sup> Not collected separately. Data for mineral exploration and development are combined with mineral land and rights. Data for used buildings and other structures are combined with used machinery and equipment.

Source: U.S. Bureau of the Census, *Census of Mineral Industries, 1987* and preliminary summary for 1992.

### No. 1144. Mineral Industries—Employment, Hours, and Earnings: 1992 to 1994

ITEM	Unit	1992	1993	1994	ITEM	Unit	1992	1993	1994
All mining:					Avg. weekly hours . . . . .	No . . .	43.8	43.8	44.1
All employees . . . . .	1,000 .	635	611	605	Avg. weekly earnings . . . . .	Dol . . .	614	619	622
Production workers . . . . .	1,000 .	448	432	431	Metal mining:				
Avg. weekly hours . . . . .	No . . .	43.9	44.3	44.7	All employees . . . . .	1,000 .	53	50	51
Avg. weekly earnings . . . . .	Dol . . .	638	647	666	Production workers . . . . .	1,000 .	42	40	41
Coal mining:					Avg. weekly hours . . . . .	No . . .	42.9	43.1	43.6
All employees . . . . .	1,000 .	127	109	114	Avg. weekly earnings . . . . .	Dol . . .	655	659	703
Production workers . . . . .	1,000 .	103	87	92	Nonmetallic minerals, except fuels:				
Avg. weekly hours . . . . .	No . . .	44.0	44.4	45.2	All employees . . . . .	1,000 .	102	101	101
Avg. weekly earnings . . . . .	Dol . . .	755	766	802	Production workers . . . . .	1,000 .	76	76	76
Oil and gas extraction:					Avg. weekly hours . . . . .	No . . .	44.9	46.1	46.5
All employees . . . . .	1,000 .	353	351	339	Avg. weekly earnings . . . . .	Dol . . .	551	585	608
Production workers . . . . .	1,000 .	228	229	222					

Source: U.S. Bureau of Labor Statistics, *Bulletin 2370 and Employment and Earnings*, March and June issues.

### No. 1145. Selected Mineral Products—Average Prices: 1970 to 1995

[Excludes Alaska and Hawaii, except as noted. See *Historical Statistics, Colonial Times to 1970*, series M 96, M 139, M 209, M 248, and M 262, for bituminous coal, crude petroleum, iron ore, lead, and aluminum, respectively]

YEAR	Tantalum (dol. per lb.) <sup>1</sup>	Copper, electrolytic <sup>2</sup> (cents per lb.)	Platinum <sup>3</sup> (dol./troy oz.)	Gold (dol./fine oz.)	Silver (dol./fine oz.)	Lead <sup>4</sup> (cents per lb.)	Tin (New York) <sup>5</sup> (cents per lb.)	Zinc <sup>6</sup> (cents per lb.)	Sulfur, crude <sup>7</sup> (dol./metric ton)	Bituminous coal <sup>8</sup> (dol./short ton)	Crude petroleum <sup>8</sup> (dol./bbl.)	Natural gas <sup>8</sup> (dol./1,000 cu. ft.)
1970 . . . . .	9.15	58	133	36	1.77	16	174	15	\$22.41	6.26	3.18	0.17
1975 . . . . .	18.32	64	164	161	4.42	22	340	39	\$44.20	19.23	7.67	0.44
1980 . . . . .	126.37	101	677	613	20.63	43	846	37	89.06	24.52	21.59	1.59
1982 . . . . .	49.95	73	327	376	7.95	26	654	39	108.27	27.14	28.52	2.46
1983 . . . . .	30.60	77	424	424	11.44	22	655	41	87.24	25.85	26.19	2.59
1984 . . . . .	37.44	67	357	361	8.14	26	624	49	94.31	25.51	25.88	2.66
1985 . . . . .	33.68	67	291	318	6.14	19	596	40	108.46	25.10	24.09	2.51
1986 . . . . .	23.74	66	461	368	5.47	22	383	38	105.22	23.70	12.51	1.94
1987 . . . . .	27.08	83	553	478	7.01	36	419	42	89.78	23.00	15.40	1.67
1988 . . . . .	47.37	121	523	438	6.53	37	441	60	85.95	22.00	12.58	1.69
1989 . . . . .	44.93	131	507	383	5.50	39	520	82	86.62	21.76	15.86	1.69
1990 . . . . .	38.06	123	467	385	4.82	46	386	75	80.14	21.71	20.03	1.71
1991 . . . . .	36.70	109	371	363	4.04	34	363	53	71.45	21.45	16.54	1.64
1992 . . . . .	34.42	107	356	345	3.94	35	402	58	48.14	20.98	15.99	1.74
1993 . . . . .	(NA)	92	370	361	4.30	32	350	46	31.86	19.79	14.25	2.03
1994 . . . . .	(NA)	111	406	385	5.29	37	369	49	28.60	19.43	13.19	1.83
1995, prel. . . . .	(NA)	137	430	385	5.30	42	420	53	35.00	(NA)	14.62	(NA)

NA Not available. <sup>1</sup> Dollars per pound of tantalum content. <sup>2</sup> Domestic market prices for wirebar, 1970, 1975-77: prices for cathode thereafter. <sup>3</sup> Average annual dealer prices. <sup>4</sup> 1970, New York prices; beginning 1975, nationwide delivered basis. <sup>5</sup> Straits tin through 1975; thereafter, composite price. <sup>6</sup> Prime western. Beginning 1975, delivered price. <sup>7</sup> F.o.b. works. <sup>8</sup> Average value at the point of production. Source: U.S. Energy Information Administration, *Annual Energy Review*.

Source: Except as noted, U.S. Bureau of Mines, *Mineral Facts and Problems*, 1980 edition; and *Mineral Commodity Summaries*, annual.

## No. 1146. Mineral Production: 1990 to 1995

[Data represent production as measured by mine shipments, mine sales or marketable production]

MINERAL	Unit	1990	1993	1994	1995
<b>FUEL MINERALS</b>					
Coal, total . . . . .	Mil. sh. tons . . . . .	1,029.1	945.4	1,033.5	(NA)
Bituminous . . . . .	Mil. sh. tons . . . . .	693.2	576.7	640.3	(NA)
Subbituminous . . . . .	Mil. sh. tons . . . . .	244.3	274.9	300.5	(NA)
Lignite . . . . .	Mil. sh. tons . . . . .	88.1	89.5	88.1	(NA)
Anthracite . . . . .	Mil. sh. tons . . . . .	3.5	4.3	4.6	(NA)
Natural gas (marketed production) . . . . .	Tril. cu. ft. . . . .	18.59	18.98	19.64	19.62
Petroleum (crude) . . . . .	Mil. bbl. <sup>1</sup> . . . . .	2,686	2,500	2,420	(NA)
Uranium (recoverable content) . . . . .	Mil. lb. . . . .	8.9	3.1	3.4	(NA)
<b>NONFUEL MINERALS</b>					
Abrasive stone <sup>2</sup> . . . . .	Metric tons . . . . .	3,709	(Z)	(Z)	(Z)
Asbestos (sales) . . . . .	1,000 metric tons . . . . .	(D)	13.0	10.0	10.0
Asphalt and related bitumens (native) <sup>3</sup> . . . . .	Mil. metric tons . . . . .	25	27	( <sup>3</sup> )	( <sup>3</sup> )
Barite, primary, sold/used by producers . . . . .	1,000 metric tons . . . . .	430	315	583	525
Boron minerals, sold or used by producers . . . . .	1,000 metric tons . . . . .	1,094	574	550	546
Bromine, sold or used by producers . . . . .	1,000 metric tons . . . . .	177	177	(D)	211
Calcium chloride (natural) . . . . .	1,000 sh. tons . . . . .	(D)	-	-	-
Carbon dioxide, natural (estimate) . . . . .	Mil. cu. ft. . . . .	-	-	-	-
<b>Cement:</b>					
Portland . . . . .	Mil. sh. tons . . . . .	75.6	71.6	74.3	72.1
Masonry . . . . .	Mil. sh. tons . . . . .	3.3	3.0	4.0	4.0
Clays . . . . .	1,000 metric tons . . . . .	42,904	40,700	42,200	46,600
Diatomite . . . . .	1,000 metric tons . . . . .	631	599	613	672
Feldspar <sup>4</sup> . . . . .	1,000 metric tons . . . . .	630	770	765	770
Fluorspar, finished shipments . . . . .	1,000 metric tons . . . . .	64	60	50	(D)
Garnet (abrasive) . . . . .	1,000 metric tons . . . . .	47.0	(D)	51	(D)
Gypsum, crude . . . . .	Mil. metric tons . . . . .	16.4	15.8	17.2	17.2
Helium <sup>5</sup> . . . . .	Mil. cu. meters . . . . .	87	96	100	102
Lime, sold or used by producers . . . . .	Mil. sh. tons . . . . .	17.5	16.8	17.4	18.4
Mica, scrap & flake, sold/used by producers . . . . .	1,000 metric tons . . . . .	109	88	110	104
Peat, sales by producers . . . . .	1,000 sh. tons . . . . .	795	612	552	577
Perlite, processed, sold or used . . . . .	1,000 metric tons . . . . .	576	569	644	719
Phosphate rock (marketable) . . . . .	Mil. metric tons . . . . .	46.3	35.0	41.0	46
Potash (K <sub>2</sub> O equivalent) sales . . . . .	1,000 metric tons . . . . .	1,713	1,470	1,470	1,470
Pumice & pumicite, producer sales . . . . .	1,000 metric tons . . . . .	443	469	490	544
Pyrites . . . . .	1,000 metric tons . . . . .	(D)	(D)	(D)	(NA)
Salt, common, sold/used by producers . . . . .	Mil. metric tons . . . . .	36.9	38.7	39.2	39.2
Sand & gravel, sold/used by producer . . . . .	Mil. metric tons . . . . .	852	895	918	907
Construction . . . . .	Mil. metric tons . . . . .	829	869	891	879
Industrial . . . . .	Mil. metric tons . . . . .	26	26	27	28
Sodium carbonate (natural) (soda ash) . . . . .	1,000 metric tons . . . . .	9,156	8,959	9,320	9,800
Sodium sulfate (natural) . . . . .	1,000 metric tons . . . . .	349	(D)	298	325
Stone <sup>6</sup> . . . . .	Mil. metric tons . . . . .	1,110	1,117	1,230	1,280
Crushed and broken . . . . .	Mil. metric tons . . . . .	1,109	1,116	1,230	1,280
Dimension . . . . .	1,000 metric tons . . . . .	1,118	1,235	(D)	(D)
Sulfur: Frasch mines (shipments) . . . . .	1,000 metric tons . . . . .	3,676	1,904	3,010	(D)
Talc, and pyrophyllite, crude . . . . .	1,000 metric tons . . . . .	1,267	(D)	(D)	1,110
Tripoli . . . . .	1,000 metric tons . . . . .	94	94	82	(D)
Vermiculite concentrate . . . . .	1,000 metric tons . . . . .	209	187	177	170
<b>METALS</b>					
Antimony ore and concentrate . . . . .	Metric tons . . . . .	(D)	(D)	(D)	(D)
Bauxite (dried) . . . . .	1,000 metric tons . . . . .	(D)	(D)	(D)	(D)
Copper (recoverable content) . . . . .	1,000 metric tons . . . . .	1,590	1,800	1,810	1,690
Gold (recoverable content) . . . . .	Metric tons . . . . .	294	331	326	320
Iron ore (gross weight) . . . . .	Mil. metric tons . . . . .	57.0	56.3	57.6	62
Lead (recoverable content) . . . . .	1,000 metric tons . . . . .	497	355	363	374
Magnesium metal . . . . .	1,000 metric tons . . . . .	139	132	128	140
Manganiferous ore (gross weight) <sup>8</sup> . . . . .	1,000 metric ton . . . . .	(D)	(D)	(D)	(D)
Mercury <sup>9</sup> . . . . .	Metric tons . . . . .	562	(D)	(D)	(D)
Molybdenum (concentrate) . . . . .	1,000 metric tons . . . . .	62	39	46	(D)
Nickel . . . . .	1,000 metric tons . . . . .	0.3	2.5	(NA)	1.7
Palladium metal . . . . .	Kilograms . . . . .	5,930	6,500	6,440	6,400
Platinum metal . . . . .	Kilograms . . . . .	1,810	1,800	1,960	2,000
Silver (recoverable content) . . . . .	Metric tons . . . . .	2,121	1,645	1,480	1,500
Titanium concentrate: Ilmenite (gross weight) . . . . .	1,000 metric tons . . . . .	(D)	(D)	(D)	(D)
Tungsten ore and concentrate <sup>10</sup> . . . . .	Metric tons . . . . .	(D)	(D)	(D)	(D)
Zinc (recoverable content) . . . . .	1,000 metric tons . . . . .	515	488	570	600

- Represents zero. D Withheld to avoid disclosing individual company data. NA Not available. Z Less than half the unit of measure. <sup>1</sup> 42 gal. bbl. <sup>2</sup> Includes grindstones, oilstones, whetstones, and deburring media. Excludes grinding pebbles, and tumblin liners. <sup>3</sup> Contains bituminous limestone and sandstone, and gilsonite. Includes road oil, 1990-93. Discontinued. <sup>4</sup> Includes apite, 1992-93. <sup>5</sup> Refined only. <sup>6</sup> Excludes abrasive stone, bituminous limestone and sandstone, and ground soapstone, all included elsewhere in table; 1993 excludes dimension stone. Includes calcareous marl and slate. <sup>7</sup> Represents shipments; includes byproduct ores. <sup>8</sup> 5 to 35 percent manganiferous ore. <sup>9</sup> Mercury produced as a byproduct of gold ores only. <sup>10</sup> Content of ore and concentrate.

Source: U.S. Bureau of Mines, *Minerals Yearbook* thru 1991; thereafter, *Annual Reports and Mineral Commodities Summaries*, annual. U.S. Energy Information Administration, *Annual Energy Review*.

## No. 1147. Mineral Production Value: 1990 to 1994

[In millions of dollars. See *Historical Statistics, Colonial Times to 1970*, series M 13-37 for selected values]

MINERAL	1990	1992	1993	1994
<b>Mineral production, total</b> . . . . .	<b>150,530</b>	<b>135,797</b>	<b>113,395</b>	<b>97,025</b>
<b>Mineral fuels, total</b> . . . . .	<b>117,066</b>	<b>103,764</b>	<b>101,519</b>	<b>97,025</b>
Coal, total . . . . .	31,336	29,287	27,020	28,926
Bituminous <sup>1</sup> . . . . .	22,266	20,856	18,624	19,953
Anthracite . . . . .	138	120	142	120
Natural gas . . . . .	31,789	32,555	38,834	36,179
Petroleum (crude) . . . . .	53,801	41,846	35,625	31,920
Uranium U <sub>3</sub> O <sub>8</sub> . . . . .	140	76	40	(NA)
<b>Industrial minerals, total</b> . . . . .	<b>21,022</b>	<b>20,496</b>	<b>(NA)</b>	<b>(NA)</b>
Abrasive stone <sup>2</sup> . . . . .	(Z)	(Z)	(Z)	(NA)
Asbestos (sales) . . . . .	(4)	6	6	5
Asphalt, related bitumens (native) <sup>3</sup> . . . . .	3,480	2,794	(NA)	(NA)
Barite, primary, sold/used by producers . . . . .	16	20	19	13
Boron minerals, sold/used by producers . . . . .	436	339	373	370
Bromine, sold/used by producers . . . . .	173	170	123	157
Calcium chloride (natural) . . . . .	(4)	(4)	(X)	(X)
Carbon dioxide, natural (estimate) . . . . .	-	-	(X)	(X)
Cement:				
Portland . . . . .	3,683	3,500	3,916	4,155
Masonry . . . . .	225	195	229	264
Clays . . . . .	1,620	1,482	1,488	1,597
Diatomite . . . . .	138	141	150	162
Feldspar . . . . .	28	29	31	30
Fluorspar, finished shipments . . . . .	(4)	(4)	(4)	(4)
Garnet (abrasive) . . . . .	7	5	4	5
Gemstones (estimate) . . . . .	53	66	58	52
Gypsum, crude . . . . .	100	101	107	118
Helium <sup>6</sup> . . . . .	113	187	189	191
Lime, sold/used by producers . . . . .	902	950	977	996
Mica, scrap and flake, sold/used by producers . . . . .	6	5	4	5
Peat (sales by producers) . . . . .	19	17	17	18
Perlite, processed, sold/used by producers . . . . .	17	16	17	19
Phosphate rock (marketable) . . . . .	1,075	1,058	759	902
Potash (K <sub>2</sub> O equivalent) . . . . .	303	334	286	274
Pumice and pumicite (sales by producers) . . . . .	11	15	12	14
Pyrites . . . . .	(4)	(4)	(4)	(4)
Salt (common), sold/used by producers . . . . .	827	803	894	906
Sand and gravel, sold/used by producers . . . . .	3,686	3,766	3,988	4,293
Construction . . . . .	3,249	3,341	3,541	3,835
Industrial . . . . .	436	425	454	458
Sodium carbonate (natural) (soda ash) . . . . .	836	836	734	650
Sodium sulfate (natural) . . . . .	34	26	(D)	25
Stone . . . . .	5,822	5,775	5,987	6,731
Crushed and broken . . . . .	5,591	5,594	5,770	6,731
Dimension . . . . .	231	181	217	(NA)
Sulfur: Frasch mines (shipments) . . . . .	335	159	101	135
Talc and pyrophyllite, crude <sup>8</sup> . . . . .	31	31	(D)	32
Tripoli . . . . .	3	3	4	(NA)
Vermiculite concentrate . . . . .	19	15	15	(D)
Industrial minerals, undistributed . . . . .	504	478	212	136
<b>Metals, total</b> . . . . .	<b>12,442</b>	<b>11,537</b>	<b>11,876</b>	<b>(NA)</b>
Antimony ore and concentrate <sup>9</sup> . . . . .	(10)	(10)	(10)	(10)
Bauxite (dried equivalent) . . . . .	(10)	(10)	(10)	(10)
Copper (recoverable content) . . . . .	4,311	4,179	3,636	4,382
Gold (recoverable content) <sup>11</sup> . . . . .	3,650	3,662	3,841	3,843
Iron ore (gross weight) . . . . .	1,741	1,732	1,643	1,700
Lead (recoverable content) . . . . .	491	308	249	286
Magnesium metal <sup>12</sup> . . . . .	433	360	377	(D)
Manganiferous ore (gross weight) <sup>13</sup> . . . . .	(10)	(10)	(10)	(10)
Mercury <sup>14</sup> . . . . .	(10)	0.4	(D)	(D)
Molybdenum (concentrate) . . . . .	348	209	165	215
Palladium metal . . . . .	22	18	25	25
Platinum metal . . . . .	27	21	21	21
Silver (recoverable content) . . . . .	329	229	227	192
Titanium concentrate: Ilmenite (gross weight) . . . . .	(10)	(10)	(10)	(10)
Tungsten ore and concentrate . . . . .	(10)	(10)	(10)	(10)
Vanadium (recoverable content) . . . . .	(10)	(10)	(10)	(10)
Zinc mine production (recoverable content) . . . . .	847	674	497	549
Metals, undistributed . . . . .	242	156	306	113

- Represents or rounds to zero. D Withheld to avoid disclosing individual company data. NA Not available. X Not applicable. Z Less than \$500,000. <sup>1</sup> Includes subbituminous and lignite. <sup>2</sup> Includes grindstones, oilstones, whetstones, and deburring media. <sup>3</sup> 1990-92, excluded from industrial minerals. <sup>4</sup> Included in "Industrial minerals, undistributed." <sup>5</sup> 1992-93, includes aplite. <sup>6</sup> Refined only. <sup>7</sup> Excludes abrasive stone, bituminous limestone and sandstone, and ground soapstone; 1993 excludes dimension stone. <sup>8</sup> State ranks based on publishable data. Includes calcareous marl and slate. <sup>9</sup> 1990-92, talc only. <sup>10</sup> Antimony content. <sup>11</sup> Included with "Metals, undistributed." <sup>12</sup> Represents shipments; includes byproduct ores. <sup>13</sup> Canvass for magnesium chloride for magnesium metal discontinued in 1986. <sup>14</sup> 5 to 35 percent manganiferous ore. <sup>15</sup> Mercury produced as a byproduct of gold ores only.

Source: U.S. Bureau of Mines, *Minerals Yearbook* thru 1991; *Annual Reports and Mineral Commodities Summaries*, annual. U.S. Energy Information Administration, *Annual Energy Review*.



## No. 1148. Nonfuel Mineral Commodities—Summary: 1994

[Preliminary estimates. Average price in dollars per metric tons except as noted]

MINERAL	MINERAL DISPOSITION					Average price per unit (dollars)	Employment (number)
	Unit	Production	Exports	Net import reliance <sup>1</sup> (percent)	Consumption, apparent		
Aluminum . . . . .	1,000 metric tons	4,950	1,700	25	6,500	<sup>2</sup> 0.85	21,500
Antimony (contained) . . . . .	Metric tons . . . . .	<sup>3</sup> 43,000	2,600	60	50,200	<sup>2</sup> 2.40	100
Arsenic . . . . .	Metric tons . . . . .	-	100	100	24,000	<sup>2</sup> 0.72	100
Asbestos . . . . .	1,000 metric tons	9	13	46	24	(D)	30
Barite . . . . .	1,000 metric tons	600	20	65	1,710	441.00	400
Bauxite and alumina . . . . .	1,000 metric tons (D)	-	130	99	4,000	415-18	20
Beryllium (contained) . . . . .	Metric tons . . . . .	225	55	( <sup>5</sup> )	200	<sup>2</sup> 275.00	425
Bismuth (contained) . . . . .	Metric tons (D)	-	120	(D)	1,500	<sup>4</sup> 3.75	30
Boron (B <sub>2</sub> O <sub>3</sub> content) . . . . .	1,000 metric tons	602	230	( <sup>5</sup> )	287	<sup>4</sup> 94.00	900
Bromine (contained) . . . . .	1,000 metric tons	<sup>3</sup> 211	25	( <sup>5</sup> )	206	<sup>2</sup> 98.00	1,700
Cadmium (contained) . . . . .	Metric tons . . . . .	1,300	1,050	21	1,600	<sup>2</sup> 11.84	125
Cement . . . . .	1,000 metric tons	77,000	600	17	92,000	412	18,000
Chromium . . . . .	1,000 metric tons	<sup>11</sup> 117	13	78	537	<sup>2</sup> 230.00	(NA)
Clays . . . . .	1,000 metric tons	46,600	4,510	( <sup>5</sup> )	42,100	(NA)	13,900
Cobalt (contained) . . . . .	Metric tons . . . . .	<sup>11</sup> 1,500	1,400	82	8,400	<sup>2</sup> 28.70	(NA)
Columbium (contained) . . . . .	Metric tons . . . . .	-	400	100	3,900	<sup>2</sup> 152.90	(NA)
Copper (Mine, contained) . . . . .	1,000 metric tons	1,890	850	6	2,570	<sup>2</sup> 137.00	13
Diamond (industrial) . . . . .	Million carats . . . . .	141.1	120	36	222	<sup>4</sup> 40.46	(NA)
Diatomite . . . . .	1,000 metric tons	670	145	( <sup>5</sup> )	525	<sup>4</sup> 259.00	1,000
Feldspar . . . . .	1,000 metric tons	770	17	( <sup>5</sup> )	761	<sup>4</sup> 41.56	400
Fluorspar . . . . .	1,000 metric tons	150	52	92	603	(NA)	180
Gallium (contained) . . . . .	Kilograms . . . . .	-	(NA)	(NA)	(NA)	425.00	20
Garnet (industrial) . . . . .	Metric tons . . . . .	53,300	7,260	( <sup>5</sup> )	44,900	85-1500	180
Gemstones . . . . .	Million dollars . . . . .	99.9	2,510	98	4,110	(NA)	850
Germanium (contained) . . . . .	Kilograms . . . . .	<sup>3</sup> 40,000	(NA)	(NA)	125,000	<sup>15</sup> 1375.00	110
Gold (contained) . . . . .	Metric tons . . . . .	320	365	( <sup>5</sup> )	(NA)	<sup>15</sup> 385.00	13,900
Graphite (crude) . . . . .	1,000 metric tons	-	30	100	30	<sup>4</sup> 1635.00	-
Gypsum (crude) . . . . .	1,000 metric tons	17,300	110	30	25,900	<sup>6</sup> 80	186,700
Indium . . . . .	Metric tons . . . . .	-	(NA)	(NA)	143	<sup>19</sup> 375.00	(NA)
Iodine . . . . .	1,000 metric tons	1,800	1,300	62	4,800	<sup>21</sup> 209.32	35
Iron ore (usable) . . . . .	Million metric tons	62	5	( <sup>5</sup> )	75.3	<sup>21</sup> 725-74.0	7,000
Iron and steel scrap (metal) . . . . .	Million metric tons	83	10.4	18	74	<sup>4</sup> 22130.00	37,000
Iron and steel slag (metal) . . . . .	1,000 metric tons	21,000	4	1	121,000	<sup>4</sup> 47.33	2,500
Lead (contained) . . . . .	1,000 metric tons	390	10	15	1,450	<sup>23</sup> 242.00	1,900
Lime . . . . .	1,000 metric tons	18,500	75	1	18,700	<sup>4</sup> 62.70	5,500
Magnesium compounds . . . . .	1,000 metric tons	300	50	50	600	(NA)	600
Magnesium metal . . . . .	1,000 metric tons	200	37	( <sup>5</sup> )	167	<sup>2</sup> 2.10	1,400
Manganese (gross weight) . . . . .	1,000 metric tons	-	22	100	<sup>25</sup> 710	<sup>26</sup> 2.40	(NA)
Mercury . . . . .	Metric tons . . . . .	<sup>27</sup> 450	220	(D)	1,480	<sup>28</sup> 250.00	-
Mica, scrap and flake . . . . .	1,000 metric tons	104	7	10	100	<sup>28</sup> 65.00	360
Molybdenum (contained) . . . . .	Metric tons . . . . .	59,000	40,000	( <sup>5</sup> )	29,000	<sup>30</sup> 35.00	700
Nickel (contained) . . . . .	Metric tons . . . . .	9,850	9,900	61	159,000	<sup>30</sup> 8,245	15
Nitrogen (fixed)-ammonia . . . . .	1,000 metric tons	13,200	200	20	16,600	<sup>4</sup> 31230.00	2,500
Nonrenewable organics . . . . .	Million metric tons (NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Peat . . . . .	1,000 metric tons	580	20	55	1,290	<sup>4</sup> 27.00	650
Perlite . . . . .	1,000 metric tons	719	25	8	779	<sup>4</sup> 29.40	125
Phosphate rock . . . . .	1,000 metric tons	45,500	3,000	( <sup>5</sup> )	43,600	<sup>4</sup> 20.50	5,000
Platinum-group metals . . . . .	Kilograms . . . . .	8,000	47,000	(NA)	(NA)	<sup>32</sup> 430.00	400
Potash (K <sub>2</sub> O equivalent) . . . . .	1,000 metric tons	1,460	450	74	5,670	<sup>4</sup> 33435.00	1,740
Pumice and pumicite . . . . .	1,000 metric tons	544	18	29	763	<sup>4</sup> 23.15	55
Salt . . . . .	1,000 metric tons	43,300	825	15	49,500	<sup>4</sup> 34115.00	4,150
Silicon (contained) . . . . .	1,000 metric tons	390	60	33	580	<sup>35</sup> 54.50	(NA)
Silver (contained) . . . . .	Metric tons . . . . .	1,500	1,500	(NA)	(NA)	<sup>16</sup> 30.00	1,000
Sodium carbonate (soda ash) . . . . .	1,000 metric tons	9,800	3,600	( <sup>5</sup> )	6,280	<sup>4</sup> 36105.00	2,800
Sodium sulfate . . . . .	1,000 metric tons	325	70	15	675	<sup>37</sup> 114.00	240
Stone (crushed) . . . . .	Million metric tons	1,280	6	-	1,280	<sup>4</sup> 5.48	77,500
Sulfur (all forms) . . . . .	1,000 metric tons	11,800	1,000	18	13,900	<sup>4</sup> 3835.00	3,100
Talc . . . . .	1,000 metric tons	1,050	190	( <sup>5</sup> )	970	<sup>4</sup> 75.60	750
Thallium (contained) . . . . .	Kilograms . . . . .	-	(NA)	100	1700	300.00	-
Tin (contained) . . . . .	Metric tons . . . . .	<sup>11</sup> 11,900	2,000	84	47,000	<sup>2</sup> 290.00	-
Titanium dioxide . . . . .	1,000 metric tons	1,280	381	( <sup>5</sup> )	1,090	<sup>2</sup> 39.96	4,600
Tungsten (contained) . . . . .	Metric tons . . . . .	-	-	87	<sup>7</sup> 15,900	<sup>4</sup> 60.00	20
Vermiculite . . . . .	1,000 metric tons	170	5	15	130	(D)	230
Zinc (contained) . . . . .	1,000 metric tons	600	400	41	41,210	<sup>23</sup> 53.00	2,700
Zirconium (Z <sub>2</sub> O <sub>2</sub> ) content . . . . .	Metric tons . . . . .	(D)	23,600	(D)	(D)	<sup>42</sup> (NA)	(NA)

- Represents or rounds to zero. D Withheld to avoid disclosure. NA Not available. <sup>1</sup> Calculated as a percent of apparent consumption. <sup>2</sup> Price per pound. <sup>3</sup> Refinery production. <sup>4</sup> Price per metric ton. <sup>5</sup> Net exporter. <sup>6</sup> Metal, vacuum-cast ingot. <sup>7</sup> Estimated consumption. <sup>8</sup> Granulated pentahydrate borax in bulk, f.o.b. mine. <sup>9</sup> Cents per kilogram, bulk, purified bromine. <sup>10</sup> 1- to 5-short ton lots. <sup>11</sup> Secondary production. <sup>12</sup> Turkish, chrome price. <sup>13</sup> Columbite price. <sup>14</sup> Value of imports per carat. <sup>15</sup> Zone refined, first reduction quality. <sup>16</sup> Price per tray ounce. <sup>17</sup> Price of flake imports. <sup>18</sup> Includes employment at calcining plants. <sup>19</sup> 99.97% indium, per kilogram. <sup>20</sup> O.i.f. value, crude, per kilogram. <sup>21</sup> Lake Superior pellets. Cents per long ton unit of iron. <sup>22</sup> Delivered, No. 1 Heavy Melting composite price. <sup>23</sup> Cents per pound. <sup>24</sup> Year-end price, per pound. <sup>25</sup> Estimated manganese content. <sup>26</sup> 46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports. <sup>27</sup> Secondary industrial production. <sup>28</sup> Price per 76-pound flask. <sup>29</sup> Price per kilogram. <sup>30</sup> London Metal Exchange cash price. <sup>31</sup> F.o.b. gulf coast. <sup>32</sup> Dealer price of platinum. Per tray ounce. <sup>33</sup> Price of K<sub>2</sub>O, muriate. <sup>34</sup> Vacuum and open pan, bulk, pellets and packaged, f.o.b. mine and plant. <sup>35</sup> Ferrosilicon, 50% Si. <sup>36</sup> Quoted year-end price, dense, bulk, f.o.b. Green River, WY. <sup>37</sup> Quoted price, bulk, f.o.b. works, East, per short ton. <sup>38</sup> Elemental sulfur, f.o.b. mine and/or plant. <sup>39</sup> Rutile, list, year-end. <sup>40</sup> Price per unit W03 (7.93 kilograms of contained tungsten per unit). <sup>41</sup> All forms. <sup>42</sup> Price for imported zircon, f.o.b. U.S. east coast.

Source: U.S. Bureau of Mines, *Mineral Commodity Summaries*, annual.



## No. 1149. Value of Domestic Nonfuel Mineral Production: 1980 to 1995

[In millions of dollars]

AREA	1980	1985	1989	1990	1991	1992	1993	1994	1995
<b>U.S. <sup>1</sup> . . . . .</b>	<b>25,140</b>	<b>23,303</b>	<b>32,220</b>	<b>33,452</b>	<b>30,579</b>	<b>32,012</b>	<b>31,912</b>	<b>35,000</b>	<b>37,600</b>
<b>Northeast. . . . .</b>	<b>1,581</b>	<b>1,964</b>	<b>2,450</b>	<b>2,479</b>	<b>2,095</b>	<b>2,308</b>	<b>2,451</b>	<b>2,620</b>	<b>2,670</b>
N.E. . . . .	268	325	455	446	347	423	424	444	467
ME . . . . .	37	41	65	55	41	56	60	61	59
NH . . . . .	25	33	33	36	30	42	37	44	39
VT . . . . .	43	50	89	87	60	60	53	53	53
MA . . . . .	91	117	144	128	112	147	160	178	206
RI . . . . .	6	12	11	18	13	21	23	26	30
CT . . . . .	66	72	113	122	91	98	91	82	81
M.A. . . . .	1,313	1,639	1,995	2,033	1,748	1,885	2,027	2,180	2,210
NY . . . . .	496	657	745	773	699	766	852	893	863
NJ . . . . .	149	178	249	229	205	240	262	289	289
PA . . . . .	668	804	1,001	1,031	844	881	913	997	1,050
<b>Midwest. . . . .</b>	<b>6,610</b>	<b>6,034</b>	<b>6,980</b>	<b>7,163</b>	<b>6,755</b>	<b>7,261</b>	<b>7,357</b>	<b>7,880</b>	<b>8,080</b>
E.N.C. . . . .	2,930	2,869	3,551	3,483	3,479	3,762	3,875	4,000	4,030
OH . . . . .	562	594	699	733	684	742	851	880	871
IN . . . . .	288	303	434	428	403	477	472	555	581
IL . . . . .	443	460	633	667	673	734	734	823	820
MI . . . . .	1,485	1,387	1,599	1,440	1,503	1,587	1,510	1,460	1,460
WI . . . . .	152	125	185	215	216	244	256	284	295
W.N.C. . . . .	3,680	3,165	3,429	3,680	3,276	3,499	3,482	3,870	4,050
MN . . . . .	1,782	1,548	1,376	1,482	1,289	1,364	1,300	1,340	1,490
IA . . . . .	252	228	283	310	344	391	398	451	484
MO . . . . .	1,054	735	1,050	1,105	880	897	855	1,090	1,110
ND . . . . .	22	24	14	25 <sup>2</sup>	17	26	25	25	25
SD . . . . .	228	208	284	319	290	301	337	323	315
NE . . . . .	80	100	104	90	89	115	126	146	142
KS . . . . .	262	322	318	349	367	405	442	497	492
<b>South . . . . .</b>	<b>7,320</b>	<b>8,029</b>	<b>8,966</b>	<b>9,291</b>	<b>8,285</b>	<b>8,560</b>	<b>8,578</b>	<b>9,520</b>	<b>10,000</b>
S.A. <sup>2</sup> . . . . .	3,454	3,998	4,985	5,132	4,497	4,651	4,689	5,090	5,290
DE <sup>2</sup> . . . . .	2	4	6	10	5	9	10	9	9
MD . . . . .	186	258	342	368	348	339	314	340	341
VA . . . . .	305	381	509	507	428	462	465	502	517
WV . . . . .	106	105	125	133	117	112	149	181	193
NC . . . . .	380	466	582	586	557	596	617	710	743
SC . . . . .	195	276	425	450	340	347	391	433	426
GA . . . . .	771	946	1,387	1,504	1,306	1,346	1,432	1,550	1,670
FL . . . . .	1,509	1,562	1,608	1,574	1,396	1,440	1,311	1,370	1,390
E.S.C. . . . .	1,030	1,251	1,537	1,692	1,533	1,640	1,564	1,790	1,860
KY . . . . .	204	268	331	359	343	401	388	428	401
TN . . . . .	394	473	638	663	548	510	510	602	660
AL . . . . .	328	407	461	559	540	543	562	626	678
MS . . . . .	104	103	108	111	102	121	100	135	125
W.S.C. . . . .	2,836	2,780	2,443	2,467	2,255	2,269	2,325	2,630	2,850
AR . . . . .	293	270	382	381	361	404	347	405	479
LA . . . . .	584	521	380	368	352	309	232	350	362
OK . . . . .	224	252	219	259	276	253	298	356	388
TX . . . . .	1,735	1,737	1,462	1,459	1,266	1,303	1,430	1,520	1,620
<b>West . . . . .</b>	<b>9,629</b>	<b>7,276</b>	<b>13,809</b>	<b>14,512</b>	<b>13,435</b>	<b>13,858</b>	<b>13,424</b>	<b>15,000</b>	<b>16,600</b>
Mountain. . . . .	7,223	4,669	9,985	10,380	9,581	10,154	9,736	11,000	12,400
MT . . . . .	280	200	566	573	534	539	484	543	581
ID . . . . .	522	359	365	375	298	306	274	346	399
WY . . . . .	761	551	827	911	929	949	844	880	976
CO . . . . .	1,265	408	458	377	338	385	399	410	448
NM . . . . .	766	657	1,122	1,103	986	871	804	930	1,080
AZ . . . . .	2,471	1,550	3,046	3,085	2,877	3,160	2,780	3,280	4,150
UT . . . . .	764	313	1,290	1,335	1,190	1,348	1,314	1,520	1,810
NV . . . . .	394	631	2,310	2,621	2,429	2,588	2,820	3,070	2,920
Pacific . . . . .	2,406	2,607	3,824	4,132	3,854	3,704	3,688	4,030	4,250
WA . . . . .	207	222	481	483	483	469	505	570	613
OR . . . . .	152	130	183	205	198	214	226	243	261
CA . . . . .	1,872	2,112	2,854	2,771	2,538	2,370	2,440	2,580	2,680
AK . . . . .	115	90	213	577	494	526	378	519	594
HI . . . . .	60	53	92	106	141	149	139	216	2106

<sup>1</sup> Includes undistributed not shown separately. <sup>2</sup> Partial data only.Source: U.S. Bureau of Mines, *Annual Reports, and Mineral Commodities Summary*, annual.

**No. 1150. Principal Fuels, Nonmetals, and Metals—U.S. Production, as Percent of World Production: 1980 to 1994**

MINERAL	WORLD PRODUCTION					PERCENT U.S. OF WORLD			
	Unit	1980	1985	1990	1994	1980	1985	1990	1994
<b>Fuels: <sup>1</sup></b>									
Coal . . . . .	Bil. sh. ton . . . . .	4.2	4.8	5.2	(NA)	20	18	20	(NA)
Petroleum (crude) . . . . .	Bil. bbl . . . . .	21.7	19.6	22	(NA)	14	17	12	(NA)
Natural gas (dry, marketable) . . . . .	Tril. cu. ft . . . . .	53.1	62	74.3	(NA)	37	26	24	(NA)
Natural gas plant liquids . . . . .	Bil. bbl . . . . .	1.4	1.5	1.8	(NA)	43	38	32	(NA)
<b>Nonmetals:</b>									
Asbestos . . . . .	1,000 metric tons	4,699	4,249	4,003	2,410	2	1	(D)	(Z)
Barite . . . . .	1,000 metric tons	7,495	6,067	5,633	4,470	27	11	8	17
Feldspar . . . . .	1,000 metric tons	3,202	4,039	5,456	6,250	20	16	12	12
Fluorspar . . . . .	1,000 metric tons	5,006	4,979	5,131	3,850	2	1	1	1
Gypsum . . . . .	Mil. metric tons . . . . .	78	87	100	101	14	15	15	17
Mica (incl. scrap) . . . . .	1,000 metric tons	228	255	215	214	46	49	51	51
Nitrogen, (fixed) - ammonia . . . . .	Mil. metric tons . . . . .	74	91	97	92	20	14	13	15
Phosphate rock, gross wt. . . . .	Mil. metric tons . . . . .	144	149	162	124	38	34	29	33
Potash (K <sub>2</sub> O equivalent) . . . . .	Mil. metric tons . . . . .	28	29	28	23	8	4	6	6
Sulfur, elemental . . . . .	Mil. metric tons . . . . .	55	54	58	51	22	22	20	23
<b>Metals, mine basis:</b>									
Bauxite . . . . .	Mil. metric tons . . . . .	89	84	109	107	2	1	(D)	(NA)
Columbian concentrates (Nb content) . . . . .	1,000 metric tons	15	15	15	37	(NA)	-	(NA)	-
Copper . . . . .	1,000 metric tons	7,405	7,988	9,017	9,260	16	14	18	20
Gold . . . . .	Metric tons . . . . .	1,219	1,532	2,133	2,290	2	5	14	14
Iron ore . . . . .	Mil. metric tons . . . . .	891	861	982	995	8	6	6	6
Lead . . . . .	1,000 metric tons	3,470	3,431	3,353	2,800	17	12	15	13
Mercury . . . . .	Metric tons . . . . .	6,806	6,136	4,523	1,760	16	9	12	(NA)
Molybdenum . . . . .	1,000 metric tons	111	98	128	104	62	50	48	45
Nickel <sup>2</sup> . . . . .	1,000 metric tons	779	813	965	(NA)	2	1	(Z)	(NA)
Silver . . . . .	1,000 metric tons	11	13	16	14	9	9	13	11
Tantalum concentrates (ta content) . . . . .	Metric tons . . . . .	544	315	400	(NA)	(NA)	(NA)	(NA)	(NA)
<b>Titanium concentrates:</b>									
Ilmenite . . . . .	1,000 metric tons	3,726	3,457	4,072	(NA)	14	(D)	(D)	(NA)
Rutile . . . . .	1,000 metric tons	436	373	481	(NA)	(D)	(D)	(D)	(NA)
Tungsten <sup>2</sup> . . . . .	1,000 metric tons	52	47	43	26	5	2	14	(NA)
Vanadium . . . . .	1,000 metric tons	37	30	31	34	12	(D)	(D)	8
Zinc <sup>2</sup> . . . . .	1,000 metric tons	5,954	6,758	7,184	6,810	6	4	8	9
<b>Metals, smelter basis:</b>									
Aluminum . . . . .	1,000 metric tons	15,383	15,398	19,292	19,100	30	23	21	17
Cadmium . . . . .	1,000 metric tons	18	19	20	18	9	8	8	6
Copper . . . . .	1,000 metric tons	7,649	8,630	9,472	11,200	14	14	15	20
Iron, pig . . . . .	Mil. metric tons . . . . .	514	499	532	512	12	9	9	10
Lead <sup>3</sup> . . . . .	1,000 metric tons	5,430	5,641	5,763	5,380	23	20	23	24
Magnesium <sup>4</sup> . . . . .	1,000 metric tons	316	325	354	267	49	42	39	48
Raw Steel . . . . .	Mil. metric tons . . . . .	717	718	771	726	14	11	12	13
Tin . . . . .	1,000 metric tons	251	193	223	199	1	2	-	(NA)
Zinc . . . . .	1,000 metric tons	6,049	6,786	7,060	7,360	6	5	5	5

- Represents or rounds to zero. D Withheld to avoid disclosing company data. NA Not available. Z Less than half the unit of measure. <sup>1</sup> Source: Energy Information Administration, *International Energy Annual*. <sup>2</sup> Content of ore and concentrate. <sup>3</sup> Refinery production. <sup>4</sup> Primary production; no smelter processing necessary. <sup>5</sup> Production from primary sources only.

Source: Except as noted, U.S. Bureau of Mines, *Annual Reports*, and *Mineral Commodity Summaries*, annual.

**No. 1151. Federal Strategic and Critical Materials Inventory: 1980 to 1994**

[As of Dec. 31. Covers strategic and critical materials essential to military and industrial requirements in time of national emergency]

MINERAL	QUANTITY <sup>1</sup>					VALUE (mil. dol.) <sup>2</sup>			
	Unit	1980	1985	1990	1994	1980	1985	1990	1994
Tin . . . . .	1,000 metric ton.	200	185	169	145	3,158	2,324	962	684
Silver . . . . .	1,000 troy oz. . . . .	139,500	136,006	92,151	59,507	2,288	801	374	158
Cobalt . . . . .	Mil. lb. . . . .	41	53	53	52	1,020	590	443	561
Bauxite <sup>3</sup> . . . . .	1,000 lg. ton . . . . .	14,333	17,957	18,033	16,549	583	871	888	191
Manganese <sup>4</sup> . . . . .	1,000 sh. ton . . . . .	5,130	4,470	4,017	2,792	599	520	962	468
Tungsten <sup>5</sup> . . . . .	Mil. lb. . . . .	97	87	82	82	817	369	253	178
Zinc . . . . .	1,000 sh. ton . . . . .	380	378	379	360	317	268	483	307
Titanium . . . . .	1,000 sh. ton . . . . .	43	48	37	37	432	405	402	221
Platinum . . . . .	1,000 troy oz. . . . .	466	466	453	453	215	154	186	131
Chromium <sup>6</sup> . . . . .	1,000 sh. ton . . . . .	804	854	1,074	1,149	773	836	917	837
Diamonds: Stones . . . . .	Carat 1,000. . . . .	19,224	12,549	7,777	6,457	349	336	267	533
Industrial, bort . . . . .	Carat 1,000. . . . .	23,693	22,001	17,353	4,012	73	39	16	3

<sup>1</sup> Consists of stockpile and nonstockpile grades and reflects uncommitted balances. <sup>2</sup> Market values are estimated trade values of similar materials and not necessarily amounts that would be realized at time of sale. <sup>3</sup> Consists of abrasive grade, metallic grade Jamaica, metallic grade Suriname, and refractory. <sup>4</sup> Consists of chemical grade, dioxide battery natural, dioxide battery synthetic, electrolytic, ferro-high carbon, ferro-med. carbon, ferro-silicon, and metal. <sup>5</sup> Consists of carbide powder, ferro, metal powder, and ores and concentrates. <sup>6</sup> Consists of ferro-high carbon, ferro-low carbon, ferro-silicon, and metal.

Source: U.S. Defense Logistics Agency, *Statistical Supplement, Stockpile Report to the Congress* (AP-3).

### No. 1152. Selected Mineral and Metal Products—Quantity and Value of Imports and Exports: 1990 to 1993

[Imports represent imports for consumption. Exports include shipments under foreign aid programs. Import and export data are not necessarily comparable to prior data due to change in tariff schedule to Harmonized System]

PRODUCT	QUANTITY					VALUE (mil. dol.)			
	Unit	1990	1991	1992	1993	1990	1991	1992	1993
<b>IMPORTS</b>									
Petroleum (crude) <sup>1</sup>	Mil. bbls.	2,222	2,124	2,295	2,543	43,833	37,123	38,553	38,469
Gem stones: Diamonds	Mil. carats	7.5	8.5	9.4	11.5	3,955	3,992	4,144	5,096
Ores and concentrates:									
Chromium (Cr <sub>2</sub> O <sub>3</sub> content)	1,000 metric tons	134	94	99	123	22	15	15	17
Copper	1,000 metric tons	91.5	60.8	102.1	37	131	69	125	46
Iron	Mil. metric tons	18.1	13.3	12.5	14	560	437	396	421
Tungsten	1,000 metric tons	6.4	7.8	2.5	1.7	31	43	16	8
Metals:									
Aluminum	1,000 metric tons	960	1,025	1,156	1,836	1,597	1,428	1,501	2,147
Cobalt <sup>2</sup>	1,000 metric tons	6.0	6.4	5.3	5.4	107	158	246	166
Copper refined ingots, etc.	1,000 metric tons	262	289	289	343	675	685	660	669
Gold (refined bullion)	Metric tons	65	147	141	130	795	1,722	1,568	1,495
Iron and steel products									
(major)	Mil. metric tons	17.8	16.2	17.4	20.0	11,612	11,962	10,977	(NA)
Platinum group <sup>3</sup>	Metric tons	125	126	132	153	1,906	1,743	1,484	1,311
Silver (refined bullion)	Metric tons	2,698	2,525	2,662	2,183	437	339	341	297
Zinc: Blocks, pigs, slabs	1,000 metric tons	632	549	644	724	992	620	784	699
<b>EXPORTS</b>									
Fuels: <sup>1</sup>									
Bituminous coal	Mil. sh. tons	95.3	98.4	(NA)	(NA)	4,464	4,588	4,427	3,197
Petroleum (crude)	Mil. bbls.	8.0	2.7	(NA)	(NA)	198.6	54.1	32.4	20.0
Nonmetallic minerals:									
Gem stones: Diamonds	Mil. carats	1.2	1.8	1.9	1.6	1,433	1,383	1,362	1,499
Nitrogen compounds (maj.)	Mil. metric tons	11.9	13.9	12.8	11.5	(NA)	(NA)	(NA)	(NA)
Phosphatic fertilizers <sup>4</sup>	Mil. metric tons	9.2	11.5	10.3	9.2	1,515	1,974	(NA)	(NA)
Metals:									
Aluminum: Ingots, slabs, crude	1,000 metric tons	684	793	604	400	1,169	1,274	843	541
Plates, sheets, bars, etc.	1,000 metric tons	419	489	534	571	1,278	1,384	1,416	1,346
Gold (refined bullion)	Metric tons	141	174	257	658	1,719	2,039	2,877	7,611
Iron and steel products									
(major)	Mil. metric tons	4.7	6.6	4.7	4.5	4,665	5,753	5,374	4,848
Magnesium <sup>5</sup>	1,000 metric tons	51.8	55.2	52	39	164	150	132	103
Molybdenum <sup>6</sup>	Metric tons	180	88	74	52	2	1	1	1
Silver (refined bullion)	Metric tons	736	787	911	705	120	115	126	100
Scrap exports:									
Aluminum	1,000 metric tons	537	461	295	212	719	542	300	211
Iron and steel	Mil. metric tons	11.7	9.5	9.4	10	1,653	1,253	1,113	1,341

NA Not available. <sup>1</sup> Source: U.S. Bureau of the Census, *U.S. Imports for Consumption and General Imports, TSUSA Commodity and Country*, FT 246, annual; and *U.S. Exports, Schedule B Commodity and Country*, FT 446, annual; 1989 and 1990, *U.S. Exports of Merchandise* and *U.S. Imports of Merchandise* compact discs, December issues. <sup>2</sup> Includes unwrought metal, waste and scrap. <sup>3</sup> Unwrought and semimanufactured. <sup>4</sup> Superphosphates and ammonium phosphates. <sup>5</sup> Metal and alloys, scrap, semimanufactured forms. <sup>6</sup> Metals and alloys, crude and scrap.

Source: Except as noted, U.S. Bureau of Mines, *Minerals Yearbook*, and *Annual Reports*.

### No. 1153. Mineral Industries—Lost Workday Injuries and Fatalities: 1994

[Excludes office workers. Lost workday injuries are nonfatal occurrences that result in days away from work, days of restricted work activity or a permanent disability. Data for all years includes injuries to independent contractors at mine sites. Rates for the noncoal industries are based only on employment and hours worked by mine employees. See also *Historical Statistics, Colonial Times to 1970*, series M 271-286]

ITEM	Coal mining	Quarrying; related industries <sup>1</sup>	Metal/nonmetal mining <sup>3</sup>	Sand and gravel mining
Injuries, total <sup>1</sup>	11,353	5,369	4,498	1,863
Fatal	44	22	13	5
Rate per million work-hours: <sup>2</sup>				
Fatal	0.04	0.03	0.02	0.02
Nonfatal	7.24	4.70	3.35	4.05
Fatalities per 1,000 employed	0.33	0.26	0.18	0.15

<sup>1</sup> Includes contractor data. <sup>2</sup> Average number of persons at work each day mines were active.

Source: U.S. Mine Safety and Health Administration, Denver, CO, unpublished data.

### No. 1154. Net U.S. Imports of Selected Minerals and Metals as Percent of Apparent Consumption, 1980 to 1994

[Percent, based on net imports which equal the difference between imports and exports plus or minus Government stockpile and industry stock changes]

MINERAL	1980	1985	1988	1989	1990	1991	1992	1993	1994
Columbium . . . . .	100	100	100	100	100	100	100	100	100
Manganese . . . . .	98	100	100	100	100	100	100	100	100
Mica (sheet) . . . . .	100	100	100	100	100	100	100	100	100
Strontium . . . . .	100	100	100	100	100	100	100	100	100
Bauxite <sup>1</sup> . . . . .	94	96	97	96	98	100	100	100	99
Asbestos . . . . .	78	65	75	90	90	95	95	95	95
Platinum group . . . . .	87	92	91	90	88	90	87	89	91
Tantalum . . . . .	90	89	86	86	86	86	85	85	86
Cobalt . . . . .	93	94	87	83	84	80	75	79	79
Chromium . . . . .	91	75	78	78	71	72	76	74	75
Tungsten . . . . .	53	68	86	84	81	91	86	82	84
Nickel . . . . .	76	71	74	71	64	61	59	63	66
Tin . . . . .	79	72	78	77	71	74	80	84	84
Barite . . . . .	44	74	76	77	71	66	52	70	82
Potash . . . . .	65	76	71	65	68	69	68	72	74
Antimony . . . . .	47	63	65	56	51	53	60	62	62
Cadmium . . . . .	55	57	64	48	46	50	52	61	50
Selenium . . . . .	59	(D)	52	55	46	50	48	39	39
Zinc <sup>2</sup> . . . . .	60	70	69	61	41	24	30	45	41
Gypsum . . . . .	35	38	36	35	36	31	31	31	30
Iron ore . . . . .	25	21	18	22	21	11	12	14	18
Iron and steel . . . . .	13	22	19	13	13	12	13	15	21
Sulfur . . . . .	14	3	16	1	15	19	20	12	16
Copper . . . . .	16	28	13	7	3	(NA)	2	7	14
Aluminum . . . . .	(3)	16	7	(NA)	(3)	(NA)	1	19	31
Silver . . . . .	7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Mercury . . . . .	27	(NA)	(NA)	(NA)	(D)	(D)	(NA)	(D)	(D)
Titanium . . . . .	32	(D)	(D)	(D)	(3)	(D)	(D)	(3)	(3)
Vanadium . . . . .	35	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosure. NA Not available. <sup>1</sup> Includes alumina. <sup>2</sup> Beginning 1990, effect of sharp rise in exports of concentrates. If calculated on a refined zinc-only basis, reliance would be about the same as pre-1990 level. <sup>3</sup> Net exports.

Source: U.S. Bureau of Mines, *Mineral Commodity Summaries*; import and export data from U.S. Bureau of the Census.

### No. 1155. Federal Offshore Leasing, Exploration, Production, and Revenue: 1980 to 1994

[See source for explanation of terms and for reliability statement]

ITEM	Unit	1980	1985	1988	1989	1990	1991	1992	1993	1994
Tracts offered . . . . .	Number . .	483	15,754	28,382	11,013	10,459	16,600	9,618	10,164	10,861
Tracts leased . . . . .	Number . .	218	681	1,621	1,049	825	676	204	336	560
Acres offered . . . . .	1,000 . . .	2,563	87,029	158,016	60,098	56,789	90,288	52,380	55,070	58,895
Acres leased . . . . .	1,000 . . .	1,134	3,574	8,839	5,581	4,263	3,414	1,021	1,714	2,775
Bonus paid for leased tracts . . . . .	Bil. dol. . .	4.2	1.6	1.3	0.6	0.6	0.3	0.1	0.1	0.3
New wells being drilled:										
Active . . . . .	Number . .	191	195	116	123	120	64	104	129	120
Suspended . . . . .	Number . .	739	348	289	361	266	249	180	193	222
Wells completed . . . . .	Number . .	9,638	12,285	12,827	12,938	13,167	13,184	13,209	13,181	13,342
Wells plugged and abandoned . . . . .	Number . .	8,057	10,487	13,164	13,846	14,677	15,430	16,348	16,709	17,427
Revenue, total <sup>1</sup> . . . . .	Bil. dol. . .	6.4	5.3	3.4	2.9	3.4	2.8	2.6	2.9	2.6
Bonuses . . . . .	Bil. dol. . .	4.2	1.6	1.3	0.6	0.6	0.3	0.1	0.1	0.3
Oil and gas royalties . . . . .	Bil. dol. . .	2.1	3.6	2.1	2.1	2.6	2.3	2.3	2.5	2.3
Rentals . . . . .	Bil. dol. . .	(Z)	0.1	0.1	0.1	0.1	0.1	0.1	(Z)	(Z)
Sales value <sup>2</sup> . . . . .	Bil. dol. . .	13.1	22.2	12.9	13.4	17.0	14.9	15.1	16.4	15.0
Crude oil . . . . .	Bil. dol. . .	4.8	9.6	4.2	4.4	5.9	5.2	5.3	4.9	4.4
Condensate . . . . .	Bil. dol. . .	0.4	1.0	0.7	0.8	1.1	1.1	1.0	0.9	0.7
Natural gas . . . . .	Bil. dol. . .	7.9	11.4	7.9	7.8	9.5	7.9	8.2	9.9	9.8
Sales volume:										
Crude oil . . . . .	Mil. bbls. .	259	351	279	260	274	263	302	307	319
Condensate . . . . .	Mil. bbls. .	19	38	41	45	51	52	52	55	51
Natural gas . . . . .	Bil. cu. ft .	4,641	4,001	4,310	4,200	5,093	4,516	4,686	4,533	4,700

Z Less than \$50 million. <sup>1</sup> Includes condensate royalties. <sup>2</sup> Production value is value at time of production, not current value.

Source: U.S. Dept. of the Interior, Minerals Management Service, *Federal Offshore Statistics*, annual.

## No. 1156. Petroleum Industry—Summary: 1980 to 1994

[Includes all costs incurred for drilling and equipping wells to point of completion as productive wells or abandonment after drilling becomes unproductive. Based on sample of operators of different size drilling establishments]

ITEM	Unit	1980	1985	1988	1989	1990	1991	1992	1993	1994
Crude oil producing wells (Dec. 31)	1,000 . . .	548	647	612	603	602	614	594	584	582
Daily output per well . . . . .	Bbl. . . . .	15.9	13.9	13.5	12.6	12.2	12.1	12.1	11.7	11.4
Completed wells drilled, total . . . . .	1,000 . . .	56.93	57.88	25.58	22.82	26.22	24.75	19.78	20.32	16.01
Crude oil . . . . .	1,000 . . .	30.50	33.14	12.53	9.76	11.53	11.36	8.26	7.65	5.69
Gas . . . . .	1,000 . . .	15.13	12.97	7.58	8.57	9.85	8.77	7.59	8.36	7.22
Dry . . . . .	1,000 . . .	11.30	11.76	5.48	4.49	4.83	4.61	3.94	4.32	3.10
Average depth per well <sup>1</sup> . . . . .	Feet . . . .	4,188	4,225	4,570	4,558	4,662	4,805	5,194	5,422	5,644
Average cost per well <sup>1</sup> . . . . .	\$1,000 . . .	368	349	355	362	384	422	383	427	(NA)
Offshore . . . . .	\$1,000 . . .	3,024	4,073	3,112	3,197	3,112	3,550	3,223	3,250	(NA)
Average cost per foot <sup>1</sup> . . . . .	Dollars . . .	77.02	75.35	70.23	73.55	76.07		70.27	75.30	(NA)
Crude oil production, total . . . . .	Mil. bbl. . .	3,138	3,274	2,971	2,779	2,685	2,707	2,617	2,499	2,419
Value at wells . . . . .	Bil. dol. . .	67.9	78.9	37.5	44.1	53.8	44.7	42.0	35.6	(NA)
Average price per barrel . . . . .	Dollars . . .	21.59	24.09	12.58	15.86	20.03	16.54	15.99	14.24	(NA)
Refinery input of crude oil . . . . .	Mil. bbl. . .	4,934	4,381	4,848	4,891	4,895	4,855	4,909	4,969	(NA)
Imports: Crude oil . . . . .	Mil. bbl. . .	1,926	1,168	1,869	2,133	2,151	2,111	2,223	2,472	(NA)
Refined petroleum products . . . . .	Mil. bbl. . .	603	681	840	809	775	500	471	(NA)	(NA)
Import value . . . . .	Bil. dol. . .	78.7	53.5	42.6	51.9	63.8	53.5	54.8	55.0	55.0
Export value . . . . .	Bil. dol. . .	7.9	9.9	7.1	7.5	9.2	9.7	9.1	7.7	6.6
Operable refineries . . . . .	Number . . .	319	223	213	204	205	202	199	187	179
Capacity (Jan. 1) . . . . .	Mil. bbl. . .	6,566	5,716	5,811	5,712	5,683	5,723	5,731	5,519	5,486
Output . . . . .	Mil. bbl. . .	5,352	5,019	5,498	5,539	5,570	5,933	6,050	(NA)	(NA)
Utilization rate . . . . .	Percent . . .	75.4	77.6	84.7	86.6	87.1	86.0	87.9	91.5	92.6
Proved reserves . . . . .	Bil. bbl. . .	29.8	28.4	26.8	26.5	26.3	24.7	23.7	23.0	22.5

NA Not available. <sup>1</sup> Source: American Petroleum Institute, *Joint Association Survey on Drilling Costs*, annual.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review, Petroleum Supply Annual; U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*.

## No. 1157. Natural Gas—Financial Performance Measure: 1985 to 1994

[LT = Long term. S&P = Standard & Poor's]

ITEM	1985	1987	1988	1989	1990	1991	1992	1993	1994
Producer segment, majors:									
Average adjusted stock price . . . . .	28.24	37.01	41.64	51.79	49.20	50.01	48.50	57.50	(NA)
S&P bond rating . . . . .	AA-	A	AA-	AA	AA	AA	AA	BBB-	BB+
LT debt as a percent of invested capital . . . . .	32.06	28.33	30.54	30.35	27.76	29.19	30.10	42.15	40.40
Times interest earned ratio . . . . .	5.09	3.76	4.42	4.32	5.07	4.04	3.93	2.25	2.55
Rate of return on common equity (%) . . . . .	14.30	10.64	17.67	18.56	17.78	12.54	9.05	7.30	6.72
Price/earnings ratio . . . . .	7.35	11.69	9.11	10.65	9.98	15.15	15.14	23.53	33.63
Market/book value ratio . . . . .	1.18	1.69	1.65	1.99	1.92	2.01	2.07	2.61	2.51
Producer segment, independents:									
Average adjusted stock price . . . . .	14.66	12.33	12.84	17.34	15.14	12.01	11.93	14.53	(NA)
S&P bond rating . . . . .	A-	BBB	BBB-	BBB-	BBB-	BBB-	BB+	BB+	BB+
LT debt as a percent of invested capital . . . . .	47.39	61.13	73.47	68.00	63.00	55.87	53.93	45.01	45.64
Times interest earned ratio . . . . .	0.36	0.52	0.91	1.59	1.46	1.21	1.46	1.83	1.04
Rate of return on common equity (%) . . . . .	-10.39	-7.85	-1.69	6.51	1.93	-1.17	1.99	5.14	0.61
Price/earnings ratio . . . . .	6.78	15.70	17.96	16.45	23.75	31.28	21.50	26.46	35.71
Market/book value ratio . . . . .	1.23	1.96	1.84	2.32	2.63	2.05	1.85	2.30	2.35
Pipeline segment, w/Columbia:									
Average adjusted stock price . . . . .	19.68	17.96	20.52	27.84	23.76	20.10	23.49	26.26	(NA)
S&P bond rating . . . . .	BBB-	BBB-	BBB	BBB	BBB	BBB-	BB+	BBB-	BBB
LT debt as a percent of invested capital . . . . .	53.35	52.92	52.29	52.99	53.24	55.91	54.61	50.24	47.30
Times interest earned ratio . . . . .	1.89	1.75	1.44	1.79	1.65	1.00	1.74	2.33	2.72
Rate of return on common equity (%) . . . . .	6.32	7.97	6.18	8.63	7.47	1.01	6.23	10.88	12.25
Price/earnings ratio . . . . .	10.94	12.04	13.42	14.66	16.00	17.36	13.18	16.68	14.42
Market/book value ratio . . . . .	1.11	1.31	1.28	1.51	1.55	1.52	1.53	1.86	1.77
Average adjusted stock price . . . . .	17.69	18.84	18.66	23.29	21.21	20.53	22.78	26.06	(NA)
S&P bond rating . . . . .	BBB+	A	A	A	A	A	A	A	A
LT debt as a percent of invested capital . . . . .	44.21	44.27	47.30	46.31	47.28	48.62	48.83	46.62	47.93
Times interest earned ratio . . . . .	2.81	3.01	2.51	2.49	2.04	1.95	2.42	2.88	2.92
Rate of return on common equity (%) . . . . .	8.55	12.19	10.35	12.35	9.17	7.17	4.09	10.95	11.45
Price/earnings ratio . . . . .	8.42	11.96	10.16	12.01	12.69	15.15	14.38	14.83	13.02
Market/book value ratio . . . . .	1.29	1.48	1.36	1.49	1.51	1.47	1.56	1.77	1.56

NA Not available.

Source: U.S. Energy Information Administration, *Natural Gas 1995: Issues and Trends*.

## No. 1158. World Crude Oil Production: 1980 to 1995

[In thousands of barrels]

COUNTRY	1980	1985	1990	1991	1992	1993	1994	1995
<b>Total</b> <sup>1</sup>	<b>59,599</b>	<b>53,981</b>	<b>60,566</b>	<b>60,210</b>	<b>60,213</b>	<b>60,640</b>	<b>60,916</b>	<b>62,227</b>
Algeria	1,106	1,037	1,175	1,230	1,214	1,190	1,170	1,197
Kuwait	1,656	1,023	1,175	190	1,058	1,872	2,034	2,061
Libya	1,787	1,059	1,375	1,483	1,433	1,377	1,378	1,390
Saudi Arabia	9,900	3,388	6,410	8,115	8,332	8,198	8,147	8,231
United Arab Emirates	1,709	1,193	2,117	2,386	2,266	2,191	2,263	2,277
Indonesia	1,577	1,325	1,462	1,592	1,504	1,528	1,514	1,523
Iran	1,662	2,250	3,088	3,312	3,429	3,650	3,635	3,643
Nigeria	2,055	1,495	1,810	1,892	1,943	2,050	2,037	2,026
Venezuela	2,168	1,677	2,137	2,375	2,371	2,450	2,514	2,750
Canada	1,435	1,471	1,553	1,548	1,598	1,680	1,743	1,814
Mexico	1,936	2,745	2,553	2,680	2,668	2,671	2,689	2,618
United Kingdom	1,622	2,530	1,820	1,797	1,825	1,915	2,375	2,489
United States	8,597	8,971	7,355	7,417	7,171	6,847	6,662	6,530
China	2,114	2,505	2,774	2,835	2,838	2,911	2,939	3,015
U.S.S.R. (former)	11,706	11,585	10,975	9,992	8,931	7,717	6,611	6,550

<sup>1</sup> Includes countries not shown separately.Source: U. S. Energy Information Administration, *Monthly Energy Review*.

## No. 1159. World Natural Gas Production: 1985 to 1993

[In quadrillion Btu's]

REGION AND COUNTRY	1985	1986	1987	1988	1989	1990	1991	1992 <sup>1</sup>	1993 <sup>1</sup>
<b>World total</b>	<b>61.42</b>	<b>62.24</b>	<b>65.46</b>	<b>68.62</b>	<b>71.59</b>	<b>72.48</b>	<b>73.99</b>	<b>73.84</b>	<b>75.15</b>
North America	20.98	20.33	21.11	22.12	22.59	23.23	23.31	23.86	24.66
Canada	3.08	2.90	3.15	3.63	3.85	3.96	4.18	4.60	5.04
United States	16.98	16.54	17.14	17.60	17.85	18.36	18.23	18.38	18.74
Central and South America	1.84	1.96	1.82	1.94	2.21	2.22	2.22	2.07	2.24
Western Europe	6.83	6.74	6.99	6.63	6.88	6.99	7.58	7.64	8.08
Eastern Europe	23.11	24.54	25.61	27.29	27.96	28.32	28.03	26.68	26.04
Middle East	2.50	2.76	3.18	3.47	3.87	3.89	4.02	4.33	4.75
Africa	1.97	1.99	2.23	2.37	2.53	2.60	2.85	2.93	2.99
Far East and Oceania	4.16	4.38	4.67	4.96	5.16	5.66	5.98	6.29	6.59

NA Not available. <sup>1</sup> Preliminary.Source: U. S. Energy Information Administration, *International Energy Annual*.

## No. 1160. Domestic Motor Gasoline Supply: 1980 to 1996

[In 1,000 barrels per day, except as noted]

ITEM	1980	1985	1988	1989	1990	1991	1992	1993	1994	1995	1996
Supply <sup>1</sup>	6,579	6,831	7,336	7,328	7,235	7,188	7,268	7,476	7,601	7,785	7,416
Production	6,506	6,419	6,956	6,963	6,959	6,975	7,058	7,360	7,312	7,586	7,375
Net imports	140	381	405	369	342	297	294	247	356	264	407
Stocks (mil. bbl.) <sup>2</sup>	261	223	228	213	220	219	216	226	215	202	214

NA Not available. <sup>1</sup> Production plus net imports less net increase in primary stocks. <sup>2</sup> End of year, includes motor gasoline blending components.Source: U.S. Energy Information Administration, *Monthly Energy Review*.

## No. 1161. Natural Gas Plant Liquids—Production and Value: 1970 to 1994

[Barrels of 42 gallons. See also *Historical Statistics, Colonial Times to 1970*, series M 143-146]

ITEM	Unit	1970	1980	1985	1988	1989	1990	1991	1992	1993	1994
Field production <sup>1</sup>	Mil. bbl.	606	576	587	595	564	566	606	621	634	630
Pentanes plus	Mil. bbl.	197	126	103	111	113	112	118	121	122	119
Liquefied petroleum gases	Mil. bbl.	400	441	479	483	451	454	488	500	512	511
Natural gas processed	Tril. cu. ft.	19	15	13	13	13	15	16	16	16	(NA)

NA Not available. <sup>1</sup> Includes other finished petroleum products, not shown separately.Source: Through 1975, U.S. Bureau of Mines, *Minerals Yearbook*; thereafter, U.S. Energy Information Administration, *Energy Data Reports*, *Petroleum Statement Annual*, *Petroleum Supply Annual*, and *Natural Gas Annual*.

## No. 1162. U.S. Petroleum Balance: 1980 to 1994

[In millions of barrels]

ITEM	1980	1985	1989	1990	1991	1992	1993	1994
<b>Petroleum products supplied . . . . .</b>	<b>6,242</b>	<b>5,740</b>	<b>6,324</b>	<b>6,201</b>	<b>6,101</b>	<b>6,234</b>	<b>6,291</b>	<b>6,467</b>
Production of products . . . . .	5,765	5,363	5,874	5,934	5,933	6,050	6,182	6,244
Crude input to refineries . . . . .	4,934	4,381	4,891	4,894	4,855	4,909	4,969	5,061
Oil, field production . . . . .	3,138	3,274	2,779	2,685	2,707	2,617	2,499	2,431
Alaska . . . . .	592	666	684	647	656	627	577	569
Lower 48 States . . . . .	2,555	2,608	2,095	2,037	2,050	1,997	1,922	1,863
Net imports . . . . .	1,821	1,094	2,081	2,112	2,068	2,194	2,441	2,542
Imports (gross excluding SPR) <sup>1</sup> . . . . .	1,910	1,125	2,112	2,142	2,111	2,223	2,472	2,574
SPR <sup>1</sup> imports . . . . .	16	43	20	10	-	4	5	4
Exports . . . . .	-105	75	52	40	42	32	36	36
Other sources . . . . .	33	12	32	98	80	90	28	88
Natural gas plant liquids (NGPL), supply . . . . .	577	604	563	574	613	628	664	694
Other liquids . . . . .	253	378	420	465	466	513	550	489
Net imports of refined products . . . . .	484	313	396	326	177	156	134	217
Imports . . . . .	578	523	656	598	500	471	461	518
Exports . . . . .	94	210	260	272	323	315	327	302
New supply of products . . . . .	6,249	5,676	6,270	6,259	6,110	6,206	6,316	6,461
Stock withdrawal, refined products . . . . .	-7	64	53	-59	-10	28	-24	6
Ending stocks, all oils . . . . .	1,392	1,519	1,581	1,621	1,617	1,592	1,647	1,653
Crude oil and lease condensate . . . . .	358	321	341	323	325	318	335	337
Strategic Petroleum Reserve (SPR) <sup>1</sup> . . . . .	108	493	580	586	569	575	587	592
Unfinished oils . . . . .	124	107	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Gasoline blending components . . . . .	17	33	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Pentanes plus . . . . .	(NA)	8	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Finished refined products . . . . .	785	557	580	712	724	(NA)	(NA)	(NA)
<b>PRODUCT TYPE SUPPLIED</b>								
<b>Total products . . . . .</b>	<b>6,242</b>	<b>5,740</b>	<b>6,324</b>	<b>6,201</b>	<b>6,101</b>	<b>6,234</b>	<b>6,291</b>	<b>6,467</b>
Finished motor gasoline . . . . .	2,407	2,493	2,675	2,641	2,623	2,660	2,729	2,774
Distillate fuel oil . . . . .	1,049	1,047	1,152	1,103	1,066	1,090	1,110	1,154
Residual fuel oil . . . . .	918	439	500	449	423	401	394	373
Liquified petroleum gases <sup>2</sup> . . . . .	414	584	609	568	616	642	633	686
Pentanes plus, other liquids, etc . . . . .	1,454	1,155	1,378	1,431	1,365	(NA)	(NA)	(NA)
Crude oil . . . . .	(NA)	22	10	9	7	5	4	3

- Represents zero. NA Not available. <sup>1</sup> SPR=Strategic petroleum reserve. See table 933. <sup>2</sup> Includes ethane.Source: U.S. Energy Information Administration, *Petroleum Supply Annual*.

## No. 1163. Crude Petroleum and Natural Gas—Production, by State: 1985 to 1994

[See also *Historical Statistics, Colonial Times to 1970*, series M 138, M 142, and M 147-161]

STATE	CRUDE PETROLEUM						NATURAL GAS MARKETED PRODUCTION <sup>1</sup>					
	Quantity (mil. bbl.)			Value (mil. dol.)			Quantity (bil. cu. ft.)			Value (mil. dol.)		
	1985	1990	1994	1985	1990	1994	1985	1990	1994	1985	1990	1994
<b>Total <sup>2</sup> . . . . .</b>	<b>3,274</b>	<b>2,685</b>	<b>2,431</b>	<b>78,884</b>	<b>32,071</b>	<b>32,071</b>	<b>17,270</b>	<b>18,594</b>	<b>19,635</b>	<b>43,343</b>	<b>31,658</b>	<b>36,850</b>
AL . . . . .	22	18	18	579	275	275	107	135	515	398	373	1,119
AK . . . . .	666	658	569	10,655	5,559	5,559	321	403	453	236	554	578
AR . . . . .	19	10	10	443	131	131	155	175	188	393	360	497
CA . . . . .	424	322	286	8,386	3,467	3,467	491	363	309	1,653	857	940
CO . . . . .	30	31	29	758	442	442	178	243	453	517	377	629
FL . . . . .	11	6	6	(NA)	(NA)	(NA)	11	6	7	26	15	10
IL . . . . .	30	20	17	795	270	270	1	1	(Z)	4	1	1
IN . . . . .	5	3	2	134	39	39	(Z)	(Z)	(Z)	1	1	(Z)
KS . . . . .	75	59	47	1,939	687	687	528	574	713	671	893	1,139
KY . . . . .	8	5	4	201	62	62	73	75	73	174	169	164
LA . . . . .	508	148	126	5,387	1,973	1,973	5,014	5,242	5,170	13,355	9,587	10,728
MA . . . . .	27	20	12	726	188	188	132	140	223	475	420	436
MS . . . . .	31	30	20	796	271	271	144	95	63	456	167	95
MT . . . . .	30	20	17	734	222	222	52	50	50	125	90	73
NE . . . . .	7	5	4	163	57	57	2	1	3	6	2	5
NM . . . . .	79	66	66	2,028	1,009	1,009	905	965	1,558	2,370	1,629	2,463
NY . . . . .	1	(Z)	(Z)	25	-	-	32	25	20	106	55	48
ND . . . . .	51	39	28	1,307	388	388	73	52	58	138	93	(NA)
OH . . . . .	15	8	9	361	140	140	182	155	132	560	393	321
OK . . . . .	163	117	91	4,256	1,395	1,395	1,936	2,258	1,935	4,930	3,548	3,290
PA . . . . .	5	2	3	114	41	41	150	178	150	474	417	414
TX . . . . .	889	674	591	23	8,849	8,849	6,053	6,343	6,354	14,097	9,939	11,985
UT . . . . .	41	23	21	773	338	338	83	146	271	293	249	417
WV . . . . .	4	2	2	86	30	30	145	178	182	558	568	480
WY . . . . .	129	103	80	3,061	1,087	1,087	417	736	696	1,252	856	1,429

NA Not available. Z Less than 500 million cubic feet or less than \$500,000. <sup>1</sup> Excludes nonhydrocarbon gases.<sup>2</sup> Includes other States not shown separately. State production does not include State offshore production.Source: U.S. Energy Information Administration, *Energy Data Reports, Petroleum Supply Annual, Natural Gas Annual, and Natural Gas Monthly*.

**No. 1164. Natural Gas—Supply, Consumption, Reserves, and Marketed Production: 1970 to 1994**

[See also *Historical Statistics, Colonial Times to 1970*, series M 147-161]

ITEM	Unit	1970	1975	1980	1985	1988	1989	1990	1991	1992	1993	1994
Producing wells (year-end)	1,000 . . . . .	117	130	182	243	257	262	270	277	276	286	288
Production value at wells	Bil. dol . . . . .	3.7	8.9	32.1	43.4	30.3	30.6	31.8	30.4	32.6	38.8	36.2
Avg. per 1,000 cu. ft . . .	Dollars . . . . .	0.17	0.44	1.59	2.51	1.69	1.69	1.71	1.64	1.74	2.03	1.83
Proved reserves <sup>1</sup>	Tril. cu. ft . . . . .	291	228	199	193	168	167	169	167	165	162	164
Marketed production <sup>2</sup>	Tril. cu. ft . . . . .	21.9	20.1	20.2	17.3	17.9	18.1	18.6	18.5	18.7	19.1	19.8
Drawn from storage . . . . .	Tril. cu. ft . . . . .	1.5	1.8	1.9	2.4	2.2	2.8	1.9	2.7	2.7	2.7	2.5
Imports <sup>3</sup>	Tril. cu. ft . . . . .	0.8	1.0	1.0	1.0	1.3	1.4	1.5	1.8	2.1	2.4	2.6
Consumption, total . . . . .	Tril. cu. ft . . . . .	21.1	19.5	19.9	17.3	18.0	18.8	18.7	19.0	19.5	20.3	20.8
Residential . . . . .	Tril. cu. ft . . . . .	4.8	4.9	4.8	4.4	4.6	4.8	4.4	4.6	4.7	5.0	4.8
Commercial <sup>4</sup> . . . . .	Tril. cu. ft . . . . .	2.4	2.5	2.6	2.4	2.7	2.7	2.6	2.7	2.8	2.9	2.9
Industrial . . . . .	Tril. cu. ft . . . . .	9.3	7.0	8.2	6.9	7.5	7.9	8.2	8.3	8.7	9.2	9.4
Lease and plant fuel	Tril. cu. ft . . . . .	1.4	1.4	1.0	1.0	1.1	1.1	1.2	1.1	1.2	1.2	1.2
Other industrial . . . . .	Tril. cu. ft . . . . .	7.9	7.0	7.2	5.9	6.4	6.8	7.0	7.2	7.5	8.0	8.2
Electric utilities <sup>5</sup> . . . . .	Tril. cu. ft . . . . .	3.9	3.2	3.7	3.0	2.6	2.8	2.8	2.8	2.8	2.7	3.0
Transportation <sup>5</sup> . . . . .	Tril. cu. ft . . . . .	0.7	0.6	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.6	0.7
Extraction losses <sup>6</sup> . . . . .	Tril. cu. ft . . . . .	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Exports . . . . .	Tril. cu. ft . . . . .	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
Additions to storage <sup>7</sup> . . . . .	Tril. cu. ft . . . . .	1.9	2.1	1.9	2.1	2.2	2.5	2.4	2.6	2.6	2.8	2.8
World production (dry) . . . . .	Tril. cu. ft . . . . .	(NA)	44.1	53.1	62.0	69.8	71.9	74.3	74.8	(NA)	(NA)	(NA)
U.S. production (dry) . . . . .	Tril. cu. ft . . . . .	21.0	19.2	19.4	16.5	17.1	17.3	17.8	17.7	17.8	18.1	18.7
Percent U.S. of world . . . . .	Percent . . . . .	56.0	43.6	36.5	26.4	24.4	24.0	24.0	23.7	(NA)	(NA)	(NA)

NA Not available. <sup>1</sup> Estimated, end of year. Source: 1970-1976; American Gas Association, Arlington, VA, (copyright); thereafter, U.S. Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, annual*. <sup>2</sup> Marketed production includes gross withdrawals from reservoirs less quantities used for reservoir repressuring and quantities vented or flared. For 1980 and thereafter, it excludes the nonhydrocarbon gases subsequently removed. <sup>3</sup> Includes imports of liquefied natural gas. <sup>4</sup> Includes deliveries to municipalities and public authorities for institutional heating and other purposes. <sup>5</sup> Pipeline fuel and vehicle fuel. <sup>6</sup> Volumetric reduction in natural gas resulting from the extraction of natural gas constituents at natural gas processing plants. <sup>7</sup> Beginning with 1980, includes liquefied natural gas (LNG) storage in above ground tanks.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review, International Energy Annual, Natural Gas Annual*, Volume I and II and *Monthly Energy Review*.

**No. 1165. Liquefied Petroleum Gases—Summary: 1980 to 1994**

[In millions of 42-gallon barrels; Includes ethane]

ITEM	1980	1990	1993	1994	ITEM	1980	1990	1993	1994
<b>Production</b> . . . . .	<b>561</b>	<b>638</b>	<b>850</b>	<b>734</b>	<b>Consumption</b> . . . . .	<b>538</b>	<b>568</b>	<b>633</b>	<b>(NA)</b>
At natural gas plants . . . . .	441	456	634	511	Ethane <sup>1</sup> . . . . .	164	186	217	(NA)
At refineries . . . . .	121	182	216	223	Propane <sup>1,2</sup> . . . . .	298	335	367	(NA)
Imports . . . . .	79	68	70	67	Butane (incl. isobutane) <sup>2</sup> . . . . .	76	47	49	(NA)
Refinery input . . . . .	85	107	179	108	Stocks, Dec. 31 . . . . .	116	98	117	99
Exports . . . . .	9	14	16	14					

NA Not available. <sup>1</sup> Reported consumption of ethane-propane mixtures have been allocated 70 percent ethane and 30 percent propane. <sup>2</sup> Reported consumption of butane-propane mixtures have been allocated 60 percent butane and 40 percent propane.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual*.

**No. 1166. World Coal Trade: 1980 to 1991**

[In millions of short tons]

COUNTRIES	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Exporting countries, total</b> <sup>1</sup> . . . . .	<b>277.2</b>	<b>292.0</b>	<b>284.5</b>	<b>332.9</b>	<b>370.2</b>	<b>376.3</b>	<b>383.0</b>	<b>415.0</b>	<b>423.5</b>	<b>440.2</b>	<b>434.6</b>
United States . . . . .	88.7	106.5	78.2	82.0	93.2	85.5	79.6	94.9	100.8	105.8	109
Australia . . . . .	46.6	48.8	62.3	82.2	96.6	101.3	111.9	109.8	108.5	116.9	132.5
South Africa . . . . .	30.7	30.5	32.7	40.9	49.8	50.1	46.9	47.4	51.6	54.5	52.7
Soviet Union . . . . .	26.2	23.0	22.8	22.8	26.5	36.9	39.1	46.0	43.9	42.7	31
Germany <sup>2</sup> . . . . .	13.8	11.2	11.5	12.4	10.5	7.9	6.9	5.5	5.9	6.0	3.9
Canada . . . . .	16.1	16.6	18.6	26.8	30.3	28.6	29.5	35.0	36.1	34.2	37.6
Poland . . . . .	34.6	30.6	38.7	47.2	39.7	37.9	34.2	35.5	31.8	61.8	19.8
China: Mainland . . . . .	4.2	5.1	6.8	7.7	8.6	10.9	14.4	16.2	16.9	19.1	20.7
<b>Importing countries, total</b> <sup>1</sup> . . . . .	<b>277.2</b>	<b>292.0</b>	<b>284.5</b>	<b>332.9</b>	<b>370.2</b>	<b>376.3</b>	<b>383.0</b>	<b>415.0</b>	<b>423.5</b>	<b>440.2</b>	<b>434.6</b>
Western Europe/Mediterranean . . . . .	126.9	126.5	112.9	132.4	152.3	149.0	145.6	146.2	154.7	172.1	180.6
Japan . . . . .	75.6	86.5	82.8	96.2	103.0	99.6	100.2	111.6	111.7	113.9	123.5
Eastern Europe . . . . .	34.8	37.0	39.7	39.9	39.1	45.4	44.9	45.1	39.6	30.6	21.9
Canada . . . . .	17.4	17.3	16.7	20.3	16.1	14.7	15.8	19.3	15.1	15.7	13.7

<sup>1</sup> Includes areas not shown separately. <sup>2</sup> Beginning 1990, represents United Germany.

Source: U.S. Energy Information Administration, 1975-84, *Outlook for U.S. Coal Imports*; thereafter, *Annual Prospects for World Coal Trade*.



### No. 1167. Coal and Coke—Summary: 1970 to 1994

[Includes coal consumed at mines. Demonstrated coal reserve base for United States on Jan. 1, 1992, was an estimated 476 billion tons. Recoverability varies between 40 and 90 percent for individual deposits; 50 percent or more of overall U.S. coal reserve base is believed to be recoverable. See also *Historical Statistics, Colonial Times to 1970*, series M 93-126]

ITEM	Unit	1970	1980	1985	1990	1991	1992	1993	1994
<b>Coal production, total</b> <sup>1</sup>	<b>Mil. sh. tons</b>	<b>613</b>	<b>830</b>	<b>884</b>	<b>1,029</b>	<b>996</b>	<b>998</b>	<b>945</b>	<b>1,034</b>
Value	Mil. dol.	3,882	20,453	22,277	(NA)	(NA)	(NA)	(NA)	(NA)
Anthracite production	Mil. sh. tons	9.7	6.1	4.7	3.5	3.4	3.1	4.3	4.7
Bituminous coal and lignite: <sup>2</sup>									
Number of mines	Number	5,601	5,598	4,547	3,243	2,846	2,134	2,326	2,209
Production	Mil. sh. tons	603	824	879	1,026	993	992	941	1,029
Value, total	Mil. dol.	3,774	20,196	22,061	22,274	21,598	(NA)	(NA)	(NA)
Average per ton	Dollars	6.26	24.52	25.10	21.71	21.45	20.98	19.79	19.43
Exports	Mil. sh. tons	72	92	93	106	109	103	75	71
Value	Mil. dol.	961	4,627	4,465	4,510	4,619	(NA)	(NA)	(NA)
Imports	1,000 sh. tons	36	1,194	1,952	2,699	3,390	3,803	7,309	7,583
Method of mining:									
Underground	Mil. sh. tons	339	337	350	425	407	407	351	399
Surface	Mil. sh. tons	264	487	529	605	589	590	594	634
Percent of total prod.	Percent	43.8	59.1	60.2	58.7	59.1	59.1	62.0	61.0
Value	Mil. dol.	(Z)	30	70	(NA)	(NA)	(NA)	(NA)	(NA)
Consumption <sup>3</sup>	Mil. sh. tons	523	703	818	896	888	892	926	930
Electric power utilities	Mil. sh. tons	320	569	694	774	772	780	814	817
Industrial	Mil. sh. tons	184	126	116	76	75	74	75	75
Productivity average: <sup>4</sup>									
Daily employment	1,000	140	225	169	131	121	110	101	97.5
Days worked	Number	228	210	204	271	274	280	280	285
Tons per worker:									
Per day	Sh. tons	18.84	16.32	23.13	32.90	35.18	37.71	(NA)	(NA)
Per year	Sh. tons	4,296	3,427	4,719	7,106	7,880	(NA)	(NA)	(NA)
Production, by State:									
Alabama	Mil. sh. tons	21	26	28	29	27	26	25	24
Illinois	Mil. sh. tons	65	63	59	60	60	60	41	53
Indiana	Mil. sh. tons	22	31	33	36	32	31	29	31
Kentucky	Mil. sh. tons	125	150	152	173	159	161	156	162
Montana	Mil. sh. tons	3	30	33	38	38	39	36	42
Ohio	Mil. sh. tons	55	39	36	35	31	30	29	30
Pennsylvania	Mil. sh. tons	90	93	71	71	65	69	60	62
Virginia	Mil. sh. tons	35	41	41	47	42	43	39	37
West Virginia	Mil. sh. tons	144	122	128	169	167	162	131	162
Wyoming	Mil. sh. tons	7	95	141	184	194	190	210	237
Other States	Mil. sh. tons	44	140	161	187	181	189	(NA)	(NA)
World production	Mil. sh. tons	3,295	4,103	4,779	5,214	4,952	4,996	4,885	(NA)
<b>Coke production</b> <sup>5</sup>	<b>Mil. sh. tons</b>	<b>66.5</b>	<b>46.1</b>	<b>28.4</b>	<b>27.6</b>	<b>24.1</b>	<b>23.4</b>	<b>23.1</b>	<b>22.2</b>
Oven coke <sup>6</sup>	Mil. sh. tons	65.7	46.1	28.7	27.6	24.0	23.0	(NA)	(NA)
Value of product at plant	Mil. dol.	2,193	6,029	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Coke and breeze	Mil. dol.	1,899	4,784	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Avg. market value per ton	Dollars	28	103	103	(NA)	(NA)	(NA)	(NA)	(NA)
Coal carbonized.	Mil. sh. tons	96.5	66.7	41.1	38.9	33.9	32.4	31.3	31.7
Average value per ton	Dollars	12.47	56.26	54.30	47.73	48.88	47.9	47.4	46.5
Yield of coke from coal	Percent	69.1	69.2	69.8	71.0	71.0	(NA)	(NA)	(NA)

NA Not available. Z Less than \$500,000. <sup>1</sup> Includes bituminous coal, lignite, and anthracite. <sup>2</sup> All domestic production data for 1970 are for mines producing 1,000 short tons or more per year; thereafter, data are for all mines. <sup>3</sup> Includes some categories not shown separately. <sup>4</sup> Data for 1970 are for mines producing 1,000 short tons or more per year; thereafter, for mines producing 10,000 short tons more. Beginning 1985, includes anthracite. <sup>5</sup> Includes beehive coke. <sup>6</sup> Prior to 1980, excludes screenings or breeze; thereafter, includes beehive and other nonrecoverable coke-oven operations.

Source: 1970, U.S. Bureau of Mines, *Minerals Yearbook*; thereafter, U.S. Energy Information Administration, *Coal Industry, annual*; *Annual Energy Review*, and *Quarterly Coal Report*, and unpublished data.

### No. 1168. Uranium Concentrate (U<sub>3</sub>O<sub>8</sub>) Industry—Summary: 1980 to 1993

[Middle demand case. See table 969. See also *Historical Statistics, Colonial Times to 1970*, series M 266-267]

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Production	1,000 sh. tons	21.9	5.6	6.8	6.5	6.5	6.9	4.4	4.0	2.8	3.1
Net imports (U <sub>3</sub> O <sub>8</sub> )	1,000 sh. tons	-1.1	3.2	6.4	7.5	6.4	5.6	12.1	9.8	12.3	(NA)
Utility and Suppliers inventories (U <sub>3</sub> O <sub>8</sub> equivalent)	1,000 sh. tons	54.4	<sup>1</sup> 68.3	<sup>1</sup> 66.2	<sup>1</sup> 64.5	<sup>1</sup> 59.1	<sup>1</sup> 54.9	45.6	36.70	(NA)	(NA)
Price (1988 dol./lb. U <sub>3</sub> O <sub>8</sub> ):											
Long-term contract price	Dollars	41.4	24.7	19.3	18.5	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Spot market price	Dollars	45.0	17.0	18.1	17.3	14.5	14.2	(NA)	(NA)	(NA)	(NA)
Delivered price	Dollars	39.9	<sup>2</sup> 33.6	<sup>2</sup> 31.9	<sup>2</sup> 19.6	<sup>2</sup> 25.7	<sup>2</sup> 27.8	(NA)	(NA)	(NA)	(NA)
Capital expenditures (1988 dollars)	Mil. dol.	1,107	37	29	63	36	35	(NA)	(NA)	(NA)	(NA)
Employment	1,000	19.9	2.4	2.1	2.0	2.0	1.6	1.3	1.0	0.7	0.4

NA Not available. <sup>1</sup> Includes natural U<sub>3</sub>O<sub>8</sub> (uranium oxide), natural UF<sub>6</sub> (uranium hexafluoride), natural UF<sub>6</sub> under usage agreement, UF<sub>6</sub> at enrichment suppliers, enriched UF<sub>6</sub> and fabricated fuel. <sup>2</sup> Average U.S. contract prices and market price settlements.

Source: U.S. Department of Energy, *Domestic Uranium Mining and Milling Industry*, annual, and *Uranium Industry*, annual.