GEMSTONES¹

(Data in million dollars, unless otherwise noted)

<u>Domestic Production and Use</u>: Domestic commercial gemstone production includes amber, agates, beryls, coral, freshwater shell, garnet, jade, jasper, mother-of-pearl, opal, quartz, sapphire, topaz, turquoise, and many other gem materials. Output of natural gemstones was primarily from Alabama, Arizona, Arkansas, Kentucky, North Carolina, Oregon, and Tennessee. Reported output of synthetic gemstones was from five firms in Arizona, California, Michigan, and New York. There was notable production of turquoise in Arizona; beryl in Maine; sapphire in Montana; opal in Nevada; ruby in North Carolina; and freshwater shell and pearl in Tennessee. Major uses were jewelry, carvings, and gem and mineral collections.

Salient Statistics—United States:	<u> 1993</u>	<u> 1994</u>	<u> 1995</u>	<u> 1996</u>	<u>1997°</u>	
Production: ² Natural ³	57.7	50.5	48.7	43.6	40.0	
Synthetic	18.1	22.2	26.0	26.0	27.0	
Imports for consumption	5,850	6,440	6,540	7,240	8,000	
Exports, including reexports	1,630	2,240	2,520	2,660	2,700	
Consumption, apparent	4,300	4,270	4,100	4,570	5,370	
Price	Variable, depending on size, type, and quality					
Stocks, yearend ⁴	NA	NA	NA	NA	NA	
Employment, mine, number ^e	1,000	1,000	850	800	800	
Net import reliance⁵ as a percent						
of apparent consumption	98	98	98	98	99	

Recycling: Insignificant.

<u>Import Sources (1993-96 by value)</u>: Israel, 30%; Belgium, 22%; India, 21%; and other, 27%. Diamond imports were about 90% of the total value of gem imports.

Tariff: Item	Number	Most favored nation (MFN) 12/31/97	Non-MFN ⁶ <u>12/31/97</u>
Diamonds, unworked or sawn	7102.31.0000	Free	Free.
Diamond, ½ carat or less	7102.39.0010	Free	10% ad val.
Diamond, cut, more than ½ carat	7102.39.0050	Free	10% ad val.
Precious stones, unworked	7103.10.2000	Free	Free.
Precious stones, simply sawn	7103.10.4000	14.7% ad val.	50% ad val.
Rubies, cut	7103.91.0010	Free	10% ad val.
Sapphires, cut	7103.91.0020	Free	10% ad val.
Emeralds, cut	7103.91.0030	Free	10% ad val.
Other precious, cut but not set	7103.99.1000	0.8% ad val.	10% ad val.
Other precious stones, other	7103.99.5000	14.7% ad val.	50% ad val.
Imitation precious stones	7018.10.2000	1.1% ad val.	20% ad val.
Synthetic cut, but not set	7104.90.1000	1.2% ad val.	10% ad val.
Pearls, natural	7101.10.0000	Free	10% ad val.
Pearls, cultured	7101.21.0000	0.8% ad val.	10 % ad val.
Pearls, imitation not strung	7018.10.1000	5.6% ad val	60% ad val.

<u>Depletion Allowance</u>: 14% (Domestic), 14% (Foreign).

<u>Government Stockpile</u>: The National Defense Stockpile (NDS) does not contain an inventory of gemstones per se. However, portions of the industrial diamond inventory are of near-gem or gem quality. Additionally, the beryl and quartz inventories contain some gem-quality materials, and the inventory of synthetic ruby and sapphire could be used by the gem industry. The Department of Defense is currently disposing of some NDS materials that may be gem quality.

GEMSTONES

Events, Trends, and Issues: Progress toward full-scale operations continued at a new Colorado diamond mine, the first commercial diamond mining operation in North America in almost a century. In addition, Federal permits were granted for further evaluations of diamond-bearing deposits at a State park in Arkansas.

Demand for gemstones, including synthetics and simulants, may increase in the United States and other industrialized nations as personal disposable income rises. A survey conducted by a domestic jewelry retailers association indicates that (in decreasing order of preference) diamonds, emeralds, sapphires, and rubies were the favorite gemstone jewelry of U.S. consumers.

World Mine Production, Reserves, and Reserve Base:

	Mine production		
	1996	<u>1997°</u>	
United States	(⁹)	(⁹)	
Angola	3,600	4,000	
Australia	18,900	19,000	
Botswana	11,000	11,000	
Brazil	700	700	
Central African Republic	350	400	
China	230	250	
Congo (Kinshasa)	3,000	3,000	
Namibia	1,300	1,300	
Russia	9,300	9,500	
South Africa	5,400	5,500	
Venezuela	230	250	
Other countries	<u>1,400</u>	<u>1,100</u>	
World total (may be rounded)	55,400	56,000	

Reserves and reserve base8

World reserves and reserve base of gem diamond are substantial. No reserves or reserve base data are available for other gemstones.

<u>World Resources</u>: Most of the world gem diamond reserves are in southern Africa, Russia, and Western Australia. Estimation of a reserve base is difficult to determine because of the changing economic evaluation of near-gem materials and recent discoveries in Australia, Canada, and Russia.

<u>Substitutes</u>: Plastics, glass, and other materials are substituted for gemstones. Synthetic materials that have the same appearance and chemical and physical properties are substituted for natural gemstones. Simulants, materials with a similar appearance but with different chemical and physical properties, also are substituted for natural gemstones.

^eEstimated. NA Not available.

¹Excludes industrial diamond and garnet. See Diamond (Industrial) and Garnet (Industrial).

²Estimated minimum production.

³Includes production of freshwater shell.

⁴Stock data are not available and are assumed to be zero for apparent consumption and net import reliance calculation.

⁵Defined as imports - exports + adjustments for Government and industry stock changes.

⁶See Appendix B.

⁷Data in thousands of carats of gem diamond.

⁸See Appendix D for definitions.

⁹Less than 1/2 unit.