

GOLD

By Earle B. Amey

Domestic survey data and tables were prepared by Mahbood Mahdavi and Wanda G. Wooten, statistical assistants. The world production table was prepared by Regina R. Coleman, international data coordinator.

In 2003, domestic mine production of gold fell to its lowest level since 1989. The continuing trend toward consolidation among the major gold companies was the primary cause of the 7% decline from the 2002 level. Although gold output fell by 21,000 kilograms per year (kg/yr), the value of the U.S. gold production increased to about \$3.3 billion in 2003. Stronger global gold prices and the weakening of the U.S. dollar resulted in an increase in gold value for 2003. The United States dropped to the world's third leading gold producer (behind South Africa and Australia) after being second since 1991 when U.S. production surpassed that of the Soviet Union. Nevada accounted for more than 80% of domestic production in 2003. The remaining output came from eight other States. Gold was produced at 50 lode mines, about a dozen large placer mines (all in Alaska), and numerous small placer mines (mostly in Alaska and the Western States). In addition, a small amount of domestic gold was produced as a byproduct of processing base metals, principally copper. Thirty mines yielded 99% of the gold produced in the United States.

Domestic gold exploration activity increased on a total dollar basis for the first time since 1997, rising sharply to \$113.6 million in 2003 from \$77.2 million in 2002. The percentage of the total world gold exploration budget going to the United States increased to 10.8% in 2003 from 9.9% in 2002. Worldwide gold exploration expenditures rose by 34.5% from those of 2002 after dropping by 8% in 2002 and by 22% in 2001 (Lowery and others, 2004).

Commercial-grade refined gold came from about two dozen domestic producers. Of several thousand companies and artisans, a few dozen companies dominated the fabrication of gold into commercial products. U.S. jewelry manufacturing was heavily concentrated in the New York City, NY, and Providence, RI, areas, with other concentrations in California, Florida, and Texas. In 2003, the estimated end uses of gold were jewelry and arts, 92%; dental, 4%; electrical and electronics, 3%; and other, 1%.

According to the World Gold Council (2004), 2003 was the 13th consecutive year of unit sales increases for gold jewelry in the United States. Total U.S. gold jewelry sales exceeded \$16.3 billion, up by 2.5% from sales in 2002.

Trade in refined bullion comprised 61% of U.S. gold imports and 63% of exports; net exports of bullion increased to 220,000 kilograms (kg), up by 19% from that of 2002. Canada provided almost 74% of the bullion imported, and Switzerland was the destination for more than 48% of the bullion exported (tables 4, 6).

The dollar price for gold rose throughout 2003, with the average price 17% above the average gold price in 2002. Engelhard Corp.'s daily price of gold ranged from a low of nearly \$321 per troy ounce¹ on April 7 to a high of about \$418 per ounce

on December 31. The average for the year was, to the nearest dollar, \$365 per ounce. The previous year's price ranged from about \$279 to \$357 per ounce and averaged \$311 per ounce.

The 12-month London, United Kingdom, gold lease rates in 2003 remained in the doldrums because the demand for lent gold fell more quickly than the reduction in the amount of gold lent to the market by central banks. Short-term lease rates continued to remain near zero (CRU International Ltd., 2004, p. 31).

Total world mine production of gold was about the same as the level reached in 2002. South Africa decreased its annual output after a small increase in 2002 but remained the leading producer among more than 80 gold-mining nations, followed by Australia, the United States, China, and Peru. Identified world gold resources at yearend 2003 were estimated to be 100 million kilograms (Mkg), of which 15% to 20% were byproduct resources; the world reserve base was estimated to be 90 Mkg, and reserves, 42 Mkg. [This report uses the resource and reserve terminology of the U.S. Geological Survey (USGS), which is republished annually in the USGS Mineral Commodity Summaries.] South Africa had about 40% of the resources, 40% of the reserve base, and 14% of the reserves. The United States had about 9% of world resources, 4% of the reserve base, and 6% of the reserves.

About 15% of all gold mined is estimated to have been used in dissipative industrial uses or is either unaccounted for or unrecoverable (Thomas and Boyle, 1986, p. 6). Therefore, of an estimated 145 Mkg of gold mined in historic times through 2003, 123 Mkg of gold remains in circulation, with about 32 Mkg held by central banks as official stocks and about 91 Mkg held privately as bullion, coin, and jewelry.

In a USGS report on undiscovered deposits of gold and other metals in the United States, the amount of gold in undiscovered U.S. mineral deposits was estimated to range between greater than 13 Mkg (90% probability) and greater than 22 Mkg (10% probability) (U.S. Geological Survey, National Mineral Resource Assessment Team, 2000). The mean estimate of gold in undiscovered deposits was 18 Mkg with nearly one-quarter of the gold estimated to be contained in undiscovered porphyry copper deposits. Other major gold deposit types considered in the report were hot spring gold, epithermal vein, plutonic porphyry gold, sediment-hosted gold, gold-silver-tellurium veins, and low-sulfide gold-quartz vein deposits. Total discovered gold resources in the United States were estimated to be 27 Mkg; identified U.S. gold resources were estimated to be 15 Mkg, and all U.S. gold production totaled 12 Mkg.

Production

In this report, domestic lode mine production data for gold were derived by the USGS from two separate voluntary surveys of U.S. operations—one for monthly production of copper,

¹Throughout this report, "ounce" refers to troy ounce; 1 kilogram is equivalent to 32.1507 troy ounces.

gold, lead, silver, and zinc from lode mines and the other for production of data surveyed annually.

A survey was sent to all 50 lode gold producers believed to be operational in 2003; 49 responded. Four of the 49 respondents reported that their mines were closed and one reported reopening. The individual company production and performance data listed in table 3 and cited elsewhere in this report were obtained from published sources, such as company annual reports.

Of the total domestic gold produced during 2003, about 94% was extracted from gold ore, and the remaining 6% was derived from other precious-metal ores, base-metal ores, and placer deposits. By comparison, similar data assembled for 1980 indicated a 63% to 37% ratio. In both years, the contribution from placer mines amounted to less than 2% of the total gold produced.

Alaska.—The State's Division of Geology and Geophysical Surveys reported that gold output decreased to 16,400 kg (528,000 ounces) worth \$192 million in 2003 from 17,400 kg (562,000 ounces) worth \$174 million in 2002, a decrease in production of about 6% and an increase in value of more than 10% (Szumigala and Harris, 2004a). Placer production, which is included in the numbers above, rose to 700 kg (23,000 ounces) from 620 kg (20,000 ounces) of gold.

The underground Fort Knox gold mine operated by Kinross Fairbanks Gold Mining Incorporated near Fairbanks began to produce gold in 1997. Kinross reported that the mine produced about 12,200 kg (392,000 ounces) of gold in 2003, making it the country's sixth leading gold producer (Kinross Gold Corp., 2004, p. 27). For purposes of ranking in this report, Newmont Gold Company's Nevada Mines are treated as a single operation.

The Greens Creek Mine on Admiralty Island near Juneau completed its seventh year at full production. Ore from the underground trackless mine was milled at the mine site. The smelter produced gold and silver dore, lead, zinc, and bulk concentrates. Hecla reported that the mine produced 3,100 kg (99,500 ounces) of gold (Hecla Mining Company, 2004). Greens Creek is a joint venture between Kennecott Greens Creek Mining Co. (70.3%) and Hecla Mining Company (29.7%).

USMX Inc.'s Illinois Creek gold mine in west-central Alaska remained on care and maintenance. The mine, however, continued to produce gold as the existing heaps were rinsed (Szumigala and Harris, 2004a, p. 9).

The Pebble property near Iliamna was Alaska's largest exploration project in 2003. Northern Dynasty Minerals Ltd. completed more than 21,945 meters (72,000 feet) of core drilling in this copper-gold porphyry. The drilling was done to confirm, delineate, and extend higher-grade areas of the Pebble deposit (Szumigala and Harris, 2004b, p. 47).

California.—Gold production in California decreased by more than 50% in 2003 (table 2). In northern California, Homestake Mining Company's McLaughlin Mine was closed in 2003. It had been the State's leading gold producer in 2002, even though mining ceased in 1996. The second leading gold producer, the Briggs Mine in southern California, which is owned by Canyon Resources Corp., produced 1,100 kg (37,000 ounces) of gold. The Briggs Mine was expanded in 2003 to include the North Briggs and Goldtooth deposits. Mining of the Goldtooth deposit was completed in mid-August 2003, and mining of the last ores from the North Briggs layback was

expected to be completed in April 2004 (Canyon Resources Corp., 2004).

Western Goldfields Inc.'s Mesquite Mine, near Brawley, ceased mining operations in the second quarter of 2002, with the depletion of the main ore body. Production from residual heap leaching continued in 2003.

Glamis Gold Ltd. (through its wholly owned subsidiary Glamis Rand Mining Co.) produced 1,100 kg (34,000 ounces) of gold at its Rand Mine near Randsburg (Glamis Gold Ltd., 2004, p. 5).

The Castle Mountain Mine near the Nevada-California State line in San Bernardino County, CA, produced an estimated 440 kg (14,000 ounces) of gold. Residual gold production was expected to continue into mid-2004 because of continued heap leaching (MK Gold Company, 2004, p. 1). Castle Mountain was a joint venture between Quest Capital Corp. (75%) and MK Gold Company (25%).

Colorado.—Gold production in the State was 26% lower, despite a significant increase in production from the Nation's ninth leading gold mine, the Cresson Mine, in the Cripple Creek District of Teller County. AngloGold Ltd. (2004, p. 30) reported that this open pit mining operation produced 8,800 kg (283,000 ounces) of gold in 2003. Calais Resources Ltd. conducted an exploratory drilling program at its Consolidated Caribou project in late 2003. The project is located within the northeast-trending Colorado mineral belt (Keller and Carroll, 2004, p. 58).

Idaho.—Meridian Gold Inc.'s closure of its Beartrack Mine near Salmon in 2001 left Idaho with no active gold mines. Beartrack produced about 130 kg (4,000 ounces) of gold in 2003, slightly more than one-half that of 2002. Leaching of crushed ore was completed in 2003 (Meridian Gold Inc., 2004).

Montana.—Exploration for gold increased, though no major company long-term activity was reported. The few existing exploration programs were confined to individuals and small companies (McCulloch, 2004, p. 76).

Placer Dome Inc.'s wholly owned Golden Sunlight Mine near Whitehall was Montana's leading gold-producing mine with 7,300 kg (235,000 ounces) of gold in 2003, 110% more than in 2002 (Placer Dome Inc., 2004b, p. 8). Mining of the open pit was completed in August 2001. Gold production was suspended in December 2003 and will recommence in mid-2005 (Placer Dome Inc., 2004a, p. 10).

Nevada.—Although gold production fell to 229,000 kg (7.4 million ounces), Nevada maintained its longstanding position as the Nation's dominant gold-producing State. Of the Nation's top 30 gold-producing mines, one-half were located in Nevada. Newmont Gold Company produced 79,600 kg (2.56 million ounces) of gold from 12 open pit operations and 5 underground mines in Elko, Eureka, Humboldt, and Pershing Counties (Newmont Gold Company, 2004, p. 18). The Twin Creeks and Gold Quarry pits were expanded in 2003. The Leeville underground mine was expected to begin operating in late 2005, and the Phoenix project was expected to begin production in mid-2006.

Barrick Gold Corporation was the Nation's second leading gold mining company in 2003 and reported recovering 48,500 kg (1.6 million ounces) of gold at its Betze-Post Mine in Eureka County. In nearby Elko County, Barrick continued the development of its Meikle Mine, the Nation's top producing underground gold mine, which produced 17,200 kg (552,000

ounces) of gold (Barrick Gold Corporation, 2004, p. 6). The mine had an underground cooling system to keep temperatures about 27° C (80° F), even though the temperature of the surrounding rock could be as much as 60° C (140° F) (Gold News, 1998). Betze-Post and Meikle are operations on the Carlin Trend that were developed within a 2,800-hectare landholding known as the Goldstrike property.

Northwest of Elko in Humboldt County, Queenstake Resources Ltd. (Canada) produced about 12,200 kg (392,000 ounces) of gold at its Jerritt Canyon Mine, the Nation's eighth leading gold mine. Queenstake acquired the property from AngloGold Ltd. and Meridian Gold Inc. on June 30, 2003 (Queenstake Resources Ltd., 2004). Other gold mines in Humboldt County included the Hycroft (formerly the Crofoot/Lewis) and the Marigold Mines.

South of and parallel to the Carlin Trend, the Battle Mountain/Eureka Trend runs from southeastern Humboldt County southeast through Lander and Eureka Counties. Gold mining operations along this trend in Lander County include the McCoy/Cove gold and silver mine, which ceased mining in March, and the country's third leading gold mine, the Cortez Mine, owned by Placer Dome (60%) and Kennecott Minerals Company (40%), which produced 33,100 kg (1.1 million ounces) (Placer Dome Inc., 2004b, p. 8).

The Round Mountain Mine of Kinross Gold Corp. (50%) and Barrick Gold Corporation (50%), located about 95 kilometers north of Tonopah, produced about 23,500 kg (757,000 ounces) of gold during the year (Barrick Gold Corporation, 2004, p. 6). Round Mountain was the fourth leading U.S. gold producer.

Newmont continued to develop the Rossi-Storm deposit at the Midas Mine, which produced 6,800 kg (219,000 ounces) of gold in 2003 (Driesner and Coyner, 2004, p. 15).

Exploration continued to increase in the State. Activity spread from Newmont's Midway property in Nye County to the Belle Helen, Clifford, Ellendale, Golden Arrow, and Hannapah Districts. To the north, discoveries by Placer Dome Inc. fueled claim staking and drilling in the Cortez and Simpson Park Mountains of Eureka County. Several companies were actively exploring at Battle Mountain and in adjacent districts of Lander and Humboldt Counties. This activity was sparked by announcements of pending development and production at Newmont's Phoenix project. Battle Mountain Gold Company continued its exploration project by extending the Phoenix zone at the Battle Mountain Complex, thereby adding about 31,000 kg (1 million ounces) of gold to its reserve base (Tingley and Castor, 2004, p. 77).

South Dakota.—Goldcorp Inc. operated the Wharf open pit gold mine near Lead, which produced about 2,200 kg (71,000 ounces) of gold (Goldcorp Inc., 2004, p. 4).

Utah.—Rio Tinto Ltd.'s Bingham Canyon Mine, which was operated by Kennecott Utah Copper Corp., produced about 9,500 kg (305,000 ounces) of gold as a byproduct of its copper mining operations near Salt Lake City. Long ranked as one of the Nation's principal gold-producing mines, Bingham Canyon was the seventh leading gold producer in 2003. Kennecott also operated the nearby Barney's Canyon Mine, an open pit and heap-leaching operation that produced 1,100 kg (35,000 ounces) of gold (Rio Tinto Ltd., 2004, p. 5).

Washington.—Echo Bay Mines Ltd.'s Kettle River underground mine, the only gold mine in the State, was closed in 2003 and produced no gold.

World Review

World gold mine production was only slightly higher than in 2002. Increased production from mines in Asia and Oceania and to a lesser extent new mines in Australia, Laos, and Saudi Arabia was enough to offset the closures, lower ore grades, and operational difficulties that adversely affected output in North America and South Africa. According to its annual review of world gold supply and demand, Gold Fields Mineral Services Limited (GFMS) calculated that the total global supply of gold in 2003 was 4.14 Mkg (133 million ounces) compared with the previous year's total supply of 3.98 Mkg (128 million ounces) (Klapwijk and others, 2004, p. 7). GFMS also reported increases in official sector sales (10.1%), no increase in mine production, no net producer hedging, and no implied net disinvestment for sales of bars and coins by private investors. Old gold scrap levels continued to increase by more than 13% in 2003, after an 18% rise in 2002 and a 16% rise in 2001.

On the demand side, GFMS reported that total fabrication was 114,000 kg (3.7 million ounces) less than its 2002 level. Jewelry fabrication decreased by 147,000 kg (4.7 million ounces) to its lowest level since 1991, owing to lower demand, particularly in Italy but also in the Arabic Middle East and East Asia. Bar hoarding decreased sharply, by 27%, largely as a result of lower bar demand in East Asia, in particular, Japan. Coin fabrication was up by 9%, largely owing to the sharp rise in Turkish coin fabrication. After 2 years of little change in volume, the amount of gold used in the electronics market rose by 14% in 2003, which reflected a strong growth across all electronic applications (Klapwijk and others, 2004, p. 10).

With regard to gold exploration, the Metals Economics Group, Halifax, Nova Scotia, Canada, determined from its annual survey of worldwide exploration budgets for 917 companies that \$1.05 billion (48.1%) of the 2003 world exploration budget total for nonferrous metals was directed to gold, with 652 companies reporting active gold programs. The expenditures for gold were \$271 million more than the \$784 million (45.2% of the total) reported for gold exploration in 2002. As in the preceding 9 years, Latin America received the highest expenditure for gold—\$250.1 million (24% of world gold exploration dollars) (Lowery and others, 2004).

Australia.—Australian gold mine production rose by about 3% from that of 2002. Australia moved up to become the world's second leading gold-producing nation. Of the 282,000 kg (9.1 million ounces) of gold mined in Australia in 2003, Western Australia, Queensland, and New South Wales accounted for about 70%, 10%, and 10%, respectively (Australian Bureau of Agriculture and Resource Economics, 2004, p. 15). Western Australia's production was derived principally from mining operations near Kalgoorlie. Other Australian gold-producing States, in descending order of output, were the Northern Territory, Tasmania, South Australia, and Victoria.

The new Thunderbox, Kirkalocka, Cornishman, and Challenger Mines added a combined 12,000 kg (386,000 ounces) to the gold output. Higher gold production at the Ridgeway Mine, which was officially opened in April 2002,

further contributed to the rise in output. The Super Pit also reported a significant increase in gold output, partly from high-grade pillar mining at the underground Mount Charlotte section, which had been scheduled to close in 2002 (Klapwijk and others, 2004, p. 40).

Brazil.—During 2003, total gold production increased modestly to about 48,000 kg (1.5 million ounces). Output from the informal, noncorporate mining sector, the Garimpeiros, was estimated to be the same as in 2002 at about 14,000 kg (450,000 ounces) of gold. A large decline in the corporate sector came from the closure of the Igarape Bahia Mine (Klapwijk and others, 2004, p. 38).

Canada.—Canada dropped to seventh in the ranking of world gold producers, as its output dropped by more than 7% to 141,000 kg (4.52 million ounces). Though some gold was recovered in all Provinces, Canada's principal gold-producing provinces were Ontario (55%), Quebec (20%), British Columbia (16%), and Parie (4%). The decrease in production can partly be attributed to the closure of mines. The suspension of mining operations at the Kiena Mine in late September 2002 and the Con and Lupin Mines in August 2003 accounted for about 4,000 kg (13,000 ounces) of the decline. Further losses were reported at the New Britannia Mine, which experienced difficult mining conditions and lower ore grades (Klapwijk and others, 2004, p. 38).

Chile.—Gold output in Chile increased to 40,000 kg (1.29 million ounces) owing to continued mine closures. Higher gold production at the Escondida and La Coipa Mines was not sufficient to offset reductions at, among others, the El Penon and Refugio Mines. Refugio has been producing gold from residual leaching of ore since the suspension of mining in May 2001. It was reported that, owing to the higher gold prices, the mine would be restored in 2005 (Klapwijk and others, 2004, p. 39).

China.—China produced an estimated 202,000 kg (6.49 million ounces) of gold in 2003, up by 6% from the 192,000 kg (6.2 million ounces) of gold produced in 2002, making China the world's fourth leading gold producer (Klapwijk and others, 2004, p. 40). The Bank of China (BOC), one of four big state-owned banks, opened gold trading to individuals on November 18, 2003, in Shanghai. The BOC set the lower limit for gold transactions at 10 grams to encourage individuals to participate in the trading of gold. The Shanghai Gold Exchange, which was set up in 2002, ended more than 50 years of Government control over the gold market in China (Platts Metals Week, 2003).

India.—The Bombay Bullion Association recommended that the customs duty on gold imports be decreased to help put an end to illegal imports of gold, mainly from neighboring Pakistan. If the duty is adopted, then India would cut its customs duty to Re100 (\$2.14) per 10 grams of gold from Re250 (\$5.36) per 10 grams of gold. A previous cut in duty from Re450 (\$9.65) per 10 grams 2 years ago reduced illegal gold imports to less than 5% of total purchases. In addition, the Indian gold market is expected to replace the traditional 99.9%-purity requirements with lower 99.5%-purity gold (CRU Monitor, 2003).

Indonesia.—Gold output decreased to about 140,000 kg (4.5 million ounces) in 2003. Most of the gold came as a byproduct of copper mining at the Grasberg and Batu Hijau Mines, which produced more than 70% of Indonesia's gold. Grasberg, the

world's leading gold-producing mine, yielded 98,000 kg (3.15 million ounces), an 8% rise compared with production in 2002. The Kelian gold mine ceased mining in June 2003 but continued to process low-grade gold stockpiles (Klapwijk and others, 2004, p. 40).

Papua New Guinea.—Gold production in Papua New Guinea dropped to 64,000 kg (2.06 million ounces) in 2003. Mining was completed at the Misima Mine in May 2001, with subsequent production coming from low-grade stockpiled ore, and output was cut at the copper-gold OK Tedi Mine, the result of reduced throughput owing to the scheduled replacement of one of the mills. The cutbacks were sufficient to negate the sharp increase at the Porgera Mine, which returned to normal operations after the power supply had been cut off by an act of vandalism in 2002 (Klapwijk and others, 2004, p. 41).

Peru.—Latin America's leading gold producer reported a 9% increase to reach 172,000 kg (5.52 million ounces) of gold output in 2003. Peru's leading gold mine and the world's second leading gold mine, Yanacocha, contributed to the gain with close to 87,000 kg (2.80 million ounces) of gold, which was 23% more than in 2002. A modest increase in gold production was reported at the Pierina Mine to just more than 28,000 kg (900,000 ounces) (Klapwijk and others, 2004, p. 39).

Russia.—Production in Russia grew by 1% to 170,000 kg (5.47 million ounces) of gold, keeping the country in the sixth position among the gold-producing countries. On a regional level, Krasnoyarsk generated just more than 30,000 kg (965,000 ounces) of gold replacing Magadan as the country's leading gold-producing territory. Ranked in second and third position, Magadan and Yakutia produced 26,000 kg (836,000 ounces) and 20,000 kg (643,000 ounces), respectively. Part of the decline in Magadan can be attributed to lower production at the Kubaka open pit, where operations were completed at the end of 2002. Commercial banks were thought to have purchased more than 162,000 kg (5.2 million ounces) of gold in 2003, or 89% of Russia's production. The modest cut from buying levels in 2002 may partly be explained by a new presidential decree, effective January 2002, which allowed the mining companies to export bullion directly (Klapwijk and others, 2004, p. 43).

South Africa.—Gold production in South Africa, the world's leading gold-producing nation, dropped by 5%; South Africa's share of world gold production, however, remained at 15% in 2003, down from 30% in 1993. The considerable decline was largely a result of operational difficulties, lower ore grades, and the effects of a strengthening rand, which resulted in the suspension of mining activities at marginal production areas in the second half of 2003 (Klapwijk and others, 2004, p. 33).

Of the top 15 gold-producing companies in the world during 2003, four were South African. AngloGold Ltd., listed on the Australian Stock Exchange 4 years earlier, dropped to become the second leading gold-producing company in the world. Gold Fields Ltd. was fourth in the world. The other two companies were Harmony Gold Mining Company Ltd. (6th) and Durban Roodepoort Deep Limited (14th). Durban Roodepoort Deep had been listed on the Australian Stock Exchange until March 1999 (Klapwijk and others, 2004, p. 34).

Uzbekistan.—The state-run mining sector in Uzbekistan underwent significant restructuring in 2003.

Kyzylkumredmetzoloto [the holding company of Navoi Mining and Metals Company (operator of the giant Muruntau Mine at Zarafshan)] and Uzolomosoltin (which manages five smaller state-owned mines) were liquidated. The production units were subsequently divided between Navoi and Almalyk Mining and Metallurgy Complex. In turn, these units were placed under the management of the ministry, the Agency for Precious Metals. Total gold production in Uzbekistan was unchanged in 2003; production at the Muruntau Mine declined by 6% to 67,000 kg (2.15 million ounces), while production increased at the Almalyk gold mining units (Klapwijk and others, 2004, p. 43).

Outlook

Worldwide consolidation will continue in the gold industry as gold producers seek to secure their assets, cut costs, and exploit gold's higher prices. The U.S. gold industry, which has been closing its gold mines (4 in 2003, 9 in 2002, 11 in 2001, 12 in 2000, and 10 in 1999), also will continue to consolidate. Old mines have started to be reopened, however, and new mines are expected to be commissioned. World exploration spending for new gold resources is expected to continue to increase after several consecutive years of decreases, with most of the development happening within Latin American countries.

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TABLE 1
 SALIENT GOLD STATISTICS¹

		1999	2000	2001	2002	2003
United States:						
Mine production:						
Quantity	kilograms	341,000	353,000	335,000	298,000	277,000
Value	thousands	\$3,070,000	\$3,180,000	\$2,940,000	\$2,980,000	\$3,250,000
Gold recovered by cyanidation:						
Extracted in vats, tanks, closed containers ²	kilograms	190,000	142,000	117,000	99,600	89,000
Leached in open heaps or dumps ³	do.	130,000	194,000	195,000	177,000	174,000
Refinery production:						
Concentrates and doré	do.	265,000	197,000	191,000	196,000	197,000
Recycled materials (new and old scrap)	do.	143,000	81,600	82,700	78,100	92,700
Exports, refined	do.	435,000	440,000	395,000	185,000	220,000
Imports for consumption, refined	do.	196,000	184,000	161,000	172,000	152,000
Net deliveries from foreign stocks in Federal Reserve Bank of New York	do.	303,000	356,000	259,000	40,000	30,000
Stocks, December 31:						
Industry ⁴	do.	14,700	9,300	3,700	3,500	5,600
Commodity Exchange (Comex) ⁵	do.	37,900	52,900	38,000	63,900	97,100
U.S. Department of the Treasury	metric tons	8,170	8,140	8,120	8,140	8,140
U.S. Gold Futures Trading, volume ⁶	do.	29,800	20,600	21,100	28,000	38,000
U.S. Department of the Treasury: ⁷						
American Eagle gold coin	kilograms	78,200	13,900	10,700	12,500	16,200
Other numismatic gold coins	do.	430	330	250	370	422
Consumption in industry and the arts	do.	245,000	183,000	179,000	163,000	200,000
Apparent demand, refined ⁸	do.	399,000	337,000	257,000	264,000	203,000
Price, average ⁹	dollars per troy ounce	279.91	280.10	272.22	311.33	364.80
Employment, mine and mill only ¹⁰		10,300	10,400	9,500	7,600	7,300
World:						
Production, mine	kilograms	2,570,000	2,590,000	2,600,000	2,580,000 ^r	2,590,000 ^c
Official bullion reserves ¹¹	metric tons	33,500	33,000	33,000	32,200	31,800

⁶Estimated. ^rRevised.

¹Data are rounded to no more than three significant digits, except prices.

²May include small quantities recovered by gravity methods.

³May include tailings, waste-ore dumps, and previously mined ore at some inactive mines.

⁴Unfabricated refined gold held by refiners, fabricators, dealers, and the U.S. Department of Defense.

⁵Commodity Exchange (Comex) Division of the New York Mercantile Exchange.

⁶Comex only.

⁷Fiscal year bullion disbursements to U.S. Mint coin programs. Fiscal year begins October 1, of year prior to year indicated.

⁸Defined as refinery production from primary materials plus refinery production from old scrap plus net bullion flow to market from foreign stocks at the New York Federal Reserve Bank plus net imports of bullion. Assumed to include gold held for investment purposes. Excludes gold contained in fabricated items, imported coins, and official monetary gold.

⁹Engelhard Corp. industries quotation.

¹⁰Data from the Mine Safety and Health Administration.

¹¹Held by central banks, governments, and international monetary organizations. Data from the International Monetary Fund.

TABLE 2
MINE PRODUCTION OF GOLD IN THE UNITED STATES, BY STATE¹

(Kilograms)

State	2002	2003
California	9,180	4,270
Nevada	240,000	227,000
Other States ²	48,500	45,700
Total	298,000	277,000

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes Alaska, Arizona, Colorado, Idaho, Montana, New Mexico, South Carolina, South Dakota, Utah, Washington, and Wisconsin.

TABLE 3
LEADING GOLD-PRODUCING MINES IN THE UNITED STATES IN 2003, IN ORDER OF OUTPUT¹

Rank	Mine	County and State	Operator	Kilograms
1	Newmont Nevada operations ²	Various counties, NV	Newmont Gold Company	72,700
2	Betze-Post/Goldstrike	Eureka, NV	Barrick Gold Corporation	48,500
3	Cortez	Lander, NV	Placer Dome Inc.	33,100
4	Round Mountain	Nye, NV	Round Mountain Gold Corporation	23,500
5	Meikle/Goldstrike	Elko, NV	Barrick Gold Corporation	17,200
6	Fort Knox ³	Fairbanks, AK	Fairbanks Gold Mining, Incorporated	12,200
7	Bingham Canyon ⁴	Salt Lake, UT	Kennecott Utah Copper Corp.	9,490
8	Jerritt Canyon	Elko, NV	Queenstake Resources, Inc.	9,400
9	Cresson	Teller, CO	Cripple Creek & Victor Gold Mining Co.	8,830
10	Golden Sunlight	Jefferson, MT	Golden Sunlight Mines, Inc.	7,310
11	Marigold	Humboldt, NV	Glamis Gold Ltd.	4,420
12	Florida Canyon	Pershing, NV	Florida Canyon Mining, Inc.	3,170
13	Greens Creek	Juneau, AK	Kennecott Greens Creek Mining Co.	3,090
14	Getchell/Turquoise Ridge	Humboldt, NV	Placer Dome Inc.	2,890
15	Bald Mountain	White Pine, NV	do.	2,820
16	Wharf	Lawrence, SD	Wharf Resources, Ltd.	2,200
17	Denton-Rawhide	Mineral, NV	Kennecott Rawhide Mining Co.	2,010
18	Rochester	Pershing, NV	Coeur d'Alene Mines Corp.	1,630
19	Briggs	Inyo, CA	Canyon Resources Corp.	1,140
20	Barney's Canyon	Salt Lake, UT	Kennecott Barney's Canyon Mining Co.	1,090
21	Rand	Kern, CA	Glamis Rand Mining Co.	1,050
22	Castle Mountain	San Bernardino, CA	Viceroy Resources Corporation	440
23	Illinois Creek ⁵	Yukon-Koyukuk, AK	American Reclamation Group LLC	428
24	Beartrack	Lemhi, ID	Meridian Gold Inc.	126
W	Homestake	Lawrence, SD	Homestake Mining Company	(6)
W	McCoy/Cove	Lander, NV	Newmont Gold Company	(6)
W	Mesquite	Imperial, CA	Western Gold Fields, Inc.	(6)
W	Midas ⁷	Elko, NV	Newmont Gold Company	(6)
W	Montana Tunnels	Jefferson, MT	Montana Tunnels Mining, Inc.	(6)
W	Ruby Hill	Eureka, NV	Homestake Mining Company	(6)

W Withheld; mines are among the leading 30 gold-producing mines in the United States but are not shown in rank order to avoid disclosing company proprietary information.

¹Data are rounded to no more than three significant digits; these mines accounted for more than 99% of the U.S. gold production in 2003.

²Includes Battle Mountain Gold Complex, Carlin Mines Complex, Gold Quarry Mine, Lone Tree Complex, Reona Mine, and Twin Creeks Mine.

³Mine production refers to gold equivalent produced.

⁴Mine production refers to total quantity of gold produced in concentrates.

⁵Source: Szumigala, D.J., and Harris, R.H., 2004, Alaska's mineral industry 2003: Alaska Division of Geology and Geophysics Surveys Information Circular 50, March, 14 p.

⁶Production information for Homestake, McCoy/Cove, Mesquite, Midas, Montana Tunnels, and Ruby Hill is withheld to avoid disclosing company proprietary data.

⁷Formerly Ken Snyder.

Sources: Company annual reports, company 10-K reports submitted to the Securities and Exchange Commission, and company news releases.

TABLE 4
U.S. EXPORTS OF GOLD, BY COUNTRY^{1,2}

Year and country	Ores and concentrates ³		Dore and precipitates		Refined bullion ⁴		Total	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2002	556	\$4,020	71,700	\$720,000	185,000	\$1,830,000	257,000	\$2,550,000
2003:								
Argentina	--	--	--	--	176	1,580	176	1,580
Armenia	--	--	19	208	259	2,660	278	2,870
Belgium	8	80	--	--	--	--	8	80
Bolivia	--	--	--	--	48	415	48	415
Brazil	--	--	--	--	200	2,350	200	2,350
Canada	--	--	31	217	2,130	25,000	2,160	25,200
Cayman Islands	--	--	--	--	1	7	1	7
China	1	10	--	--	31	334	32	344
Costa Rica	--	--	--	--	228	2,700	228	2,700
Czech Republic	1	5	--	--	--	--	1	5
Dominican Republic	590	4,940	--	--	70	504	660	5,440
El Salvador	--	--	--	--	9	112	9	112
France	8	91	--	--	--	--	8	91
Georgia	2	20	--	--	--	--	2	20
Germany	116	1,920	--	--	508	3,040	624	4,960
Guatemala	--	--	--	--	299	3,780	299	3,780
Hong Kong	--	--	--	--	98	1,090	98	1,090
India	--	--	--	--	11	131	11	131
Indonesia	--	--	--	--	65	693	65	693
Ireland	(5)	4	--	--	--	--	(5)	4
Israel	--	--	(5)	8	--	--	(5)	8
Italy	11	83	--	--	9	104	20	188
Japan	1	5	5	58	4	46	9	109
Korea, Republic of	--	--	--	--	16	127	16	127
Malaysia	--	--	--	--	493	5,140	493	5,140
Mexico	50	366	--	--	11,600	128,000	11,600	128,000
Netherlands	1	11	--	--	2	26	4	37
Norway	--	--	--	--	10	114	10	114
Pakistan	--	--	--	--	24	279	24	279
Peru	--	--	--	--	1,440	15,400	1,440	15,400
South Africa	1	7	--	--	7	46	8	53
Spain	--	--	--	--	498	6,080	498	6,080
St. Lucia	--	--	--	--	1	6	1	6
Sweden	--	--	3	15	1	8	3	22
Switzerland	3	30	131,000	1,540,000	106,000	1,170,000	237,000	2,710,000
Thailand	(5)	5	--	--	--	--	(5)	5
Trinidad and Tobago	--	--	--	--	7	74	7	74
Turkey	--	--	18	181	267	2,820	285	3,010
United Arab Emirates	--	--	--	--	1,050	11,200	1,050	11,200
United Kingdom	32	295	69	389	94,400	1,120,000	94,500	1,120,000
Uruguay	--	--	--	--	66	696	66	696
Venezuela	--	--	--	--	--	--	--	--
Vietnam	--	--	--	--	136	1,260	136	1,260
Total	826	7,870	131,000	1,550,000	220,000	2,500,000	352,000	4,050,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Ash and residues data were zero for listed years.

³Includes base-metal ores, concentrates, and matte destined for refining.

⁴Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold excluded.

⁵Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF GOLD, BY COUNTRY¹

Year and country	Waste and scrap		Metal powder		Gold compounds	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2002	85,800	\$507,000	10,900	\$107,000	417,000	\$8,550
2003:						
Armenia	--	--	213	2,510	--	--
Australia	--	--	--	--	1,310	43
Belgium	2,750	2,560	--	--	--	--
Bolivia	--	--	--	--	1,040	19
Brazil	--	--	--	--	120	4
Canada	60,200	361,000	6	47	349,000	6,280
China	145	49	15	136	--	--
Dominican Republic	61	464	--	--	41,200	1,260
El Salvador	--	--	--	--	403	7
France	--	--	(2)	3	100	7
Germany	4,480	15,000	10	81	1,060	22
Guatemala	1,390	8,840	--	--	--	--
Hong Kong	2	16	60	755	16,600	298
India	--	--	--	--	867	16
Ireland	--	--	3	21	1,380	26
Israel	1	13	7	53	74,000	843
Italy	--	--	31	389	245	4
Japan	280	2,650	33	427	234	4
Korea, Republic of	8	3	9	64	934	17
Mexico	--	--	12	94	3,480	66
Netherlands	--	--	--	--	7,510	149
Peru	--	--	--	--	338	6
Portugal	1	8	--	--	--	--
Singapore	10	3	1	10	31,200	903
Spain	(2)	7	--	--	--	--
Switzerland	4	30	96	1,030	2,550	46
Taiwan	3	24	18	223	253	5
Thailand	--	--	2	14	--	--
Turkey	--	--	13	155	--	--
United Kingdom	89,400	168,000	345	3,590	31,000	569
Venezuela	--	--	--	--	186	3
Total	159,000	559,000	874	9,590	565,000	10,600

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF GOLD, BY COUNTRY¹

Year and country	Ores and concentrates ²		Dore and precipitates		Refined bullion ³		Total	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2002	2,720	\$27,700	42,200	\$334,000	172,000	\$1,740,000	217,000	\$2,100,000
2003:								
Armenia	--	--	--	--	14	144	14	144
Aruba	--	--	--	--	1,160	13,000	1,160	13,000
Australia	26	296	1	14	41	454	68	765
Austria	--	--	--	--	15	183	15	183
Belgium	--	--	--	--	13	157	13	157
Bolivia	--	--	289	2,170	--	--	289	2,170
Brazil	--	--	(4)	3	12,700	148,000	12,700	148,000
Canada	1,840	21,600	19	193	112,000	1,350,000	114,000	1,370,000
Chile	100	1,340	--	--	6,250	72,300	6,350	73,700
China	--	--	--	--	15	221	15	221
Colombia	--	--	51,400	384,000	7,490	84,300	58,900	469,000
Costa Rica	--	--	--	--	5	42	5	42
Dominican Republic	--	--	--	--	116	1,160	116	1,160
Ecuador	--	--	55	421	--	--	55	421
Equatorial Guinea	--	--	1	6	--	--	1	6
Germany	--	--	--	--	99	1,120	99	1,120
Ghana	--	--	--	--	2	19	2	19
Guyana	--	--	--	--	67	850	67	850
Honduras	--	--	4,360	33,200	--	--	4,360	33,200
Hong Kong	--	--	--	--	158	1,930	158	1,930
Italy	--	--	--	--	4	44	4	44
Mexico	--	--	2,240	28,200	8,750	102,000	11,000	130,000
Netherlands Antilles	--	--	--	--	17	230	17	230
Nicaragua	--	--	2,410	18,000	--	--	2,410	18,000
Panama	--	--	590	4,490	118	1,210	708	5,700
Paraguay	--	--	--	--	43	478	43	478
Peru	--	--	32,300	340,000	72	809	32,400	341,000
South Africa	--	--	8	95	--	--	8	95
Suriname	--	--	--	--	190	2,500	190	2,500
Switzerland	--	--	--	--	822	9,660	822	9,660
Taiwan	--	--	--	--	15	163	15	163
Tanzania	--	--	3	29	1	5	4	33
Togo	--	--	--	--	76	600	76	600
United Kingdom	--	--	1,460	20,400	--	--	1,460	20,400
Uruguay	--	--	--	--	178	1,940	178	1,940
Venezuela	--	--	7	51	1,320	13,900	1,320	14,000
Total	1,960	23,300	95,200	832,000	152,000	1,810,000	249,000	2,660,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes base metal ores, concentrates, and matte destined for refining.

³Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold excluded.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF GOLD, BY COUNTRY¹

Year and country	Waste and scrap		Metal powder		Gold compounds	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2002	11,900	\$74,400	10,700	\$93,500	18,100	\$952
2003:						
Aruba	50	790	--	--	--	--
Australia	--	--	14	133	2,000	22
Belgium	--	--	--	--	1	2
Bolivia	9	67	2	25	--	--
Brazil	2	25	--	--	--	--
British Virgin Islands	(2)	7	--	--	--	--
Burkina Faso	--	--	5	22	--	--
Canada	2,000	16,200	425	6,070	1,540	6
China	44	369	--	--	--	--
Colombia	906	8,510	34	289	--	--
Costa Rica	827	7,110	--	--	--	--
Czech Republic	--	--	--	--	19	3
Dominican Republic	6,940	68,500	108	1,090	--	--
Ecuador	109	1,250	--	--	--	--
El Salvador	3	30	--	--	--	--
France	29	235	--	--	--	--
Germany	14	121	2	35	11,900	238
Ghana	--	--	1	16	--	--
Honduras	30	288	3,390	34,300	--	--
Hong Kong	9	96	--	--	--	--
India	1	4	--	--	--	--
Ireland	110	800	--	--	--	--
Israel	(2)	3	--	--	--	--
Italy	57	352	--	--	--	--
Jamaica	1	8	--	--	--	--
Japan	--	--	(2)	4	14,000	462
Korea, Republic of	8	70	--	--	--	--
Liberia	--	--	56	576	--	--
Malaysia	123	1,160	--	--	--	--
Mexico	1,480	11,700	--	--	--	--
Netherlands	18	183	--	--	--	--
Netherlands Antilles	(2)	5	--	--	--	--
Panama	472	4,710	--	--	--	--
Peru	5	30	--	--	--	--
Philippines	17	240	--	--	--	--
Singapore	4	49	--	--	--	--
Suriname	15	368	--	--	--	--
Switzerland	3	26	14	154	--	--
Taiwan	29	258	--	--	--	--
Thailand	--	--	(2)	3	--	--
United Kingdom	1,620	9,400	--	--	2,380	52
Uruguay	--	--	27	288	--	--
Venezuela	20	240	--	--	--	--
Total	15,000	133,000	4,080	43,000	31,800	785

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 8
GOLD: WORLD MINE PRODUCTION, BY COUNTRY^{1,2}

(Kilograms)

Country	1999	2000	2001	2002	2003 ^c
Algeria	--	--	300	369	365 ³
Argentina	38,515	25,954	30,632 ^r	32,530 ^r	38,355 ³
Armenia	400 ^e	600	1,900	3,200	1,800 ³
Australia	301,070	296,410	285,030	273,010	282,000 ³
Belize ^c	6	7 ^r	1	1	1
Benin ^e	15 ^r	-- ^{r,3}	16 ^{r,3}	20 ^r	20
Bolivia	11,788	12,001	12,395	11,256	9,362 ³
Botswana	2	4	2	8	8
Brazil ^d	52,634	50,393	51,867 ^r	47,886 ^r	48,000
Bulgaria ^c	1,034	868 ^r	1,540 ^r	1,110 ^r	1,100
Burkina Faso	869 ^r	553 ^r	209 ^r	390 ^r	400
Burundi	--	--	415	483 ^r	500
Burma ^c	267 ³	250	200	200	150
Cameroon ^c	1,000	1,000	1,000	1,000	1,000
Canada	157,617	156,207	158,875	151,504 ^r	140,559 ³
Central African Republic ^c	41 ³	12 ³	20	20	20
Chile	48,069	54,143	42,673	38,688 ^r	40,000
China ^e	173,000	180,000	185,000	192,000 ^r	202,000
Colombia	43,847	37,018	21,813	20,823 ^r	46,515 ³
Congo, Brazzaville ^e	10	10	10	10	10
Congo, Kinshasa	207	52	50	50 ^e	100
Costa Rica ^c	165 ³	50 ^r	100	100	110
Cote d'Ivoire	2,717	3,154	3,100 ^e	2,000 ^e	2,000
Cuba ^c	1,000	1,000	1,000	1,000	500
Dominican Republic	651	--	--	--	--
Ecuador ⁵	2,026	2,871	3,005 ^r	10,650 ^r	10,700
El Salvador ^e	71	--	--	--	--
Equatorial Guinea ^c	500	500	500	500	500
Eritrea	534	264	107 ^r	-- ^r	--
Ethiopia ⁶	4,905	5,177	5,200 ^e	5,300 ^e	5,300
Fiji	4,428	3,842	3,858	3,731	3,250 ³
Finland	5,900 ^e	4,951	5,552	4,600 ^e	5,600
France ^c	3,600	2,632 ³	3,000	2,800	2,800
French Guiana	2,819	3,469	3,971	2,971	3,000
Gabon ^{e,7}	70	70	70	70	70
Georgia ^c	2,000	2,000	2,000	2,000	2,000
Ghana	79,946	72,100	68,341 ^r	69,271 ^r	69,600
Guatemala ^c	4,449 ³	4,500	4,500	4,500 ^e	4,550
Guinea	12,001	13,104	16,264 ^r	16,666 ^r	16,000
Guyana	12,905	13,510	14,183	13,581 ^r	14,000
Honduras	879	878	4,574 ^r	4,984 ^r	5,000
India ⁸	2,500	6,200	3,700	3,800 ^e	3,100
Indonesia ⁹	127,184	124,596	166,091	142,238 ^r	140,000
Iran	930	765	770 ^e	650 ^{r,e}	500
Italy ^c	700	709 ³	503 ³	500	500
Jamaica	--	--	214	214 ^e	200
Japan	9,405	8,399	7,815	8,615	8,143 ³
Kazakhstan	20,236	28,171	27,100	27,000 ^e	30,000
Kenya	990	1,243	1,545	1,477 ^r	1,500
Korea, North ^c	2,500	2,000	2,000	2,000	2,000
Korea, Republic of ⁸	25,730	22,608	28,595	26,181	27,000
Kyrgyzstan ^e	20,000	22,000	24,000	17,000	22,476 ³
Liberia ^c	25 ^r	25 ^r	57 ^{r,3}	42 ^{r,3}	20
Madagascar	8 ^e	5	(10)	-- ^e	--
Malaysia	3,449	4,026	3,965	4,289	4,739 ³
Mali	23,688	28,717	42,288	56,028 ^r	45,528 ³
Mexico	23,755	26,375	26,300 ^e	20,617	20,000
Mongolia	10,146	11,808	13,675	12,097	12,000
Morocco	-- ^e	505 ^e	1,191 ^r	2,654	1,863 ³
Mozambique	19 ^r	23	22 ^r	17 ^r	63 ³

See footnotes at end of table.

TABLE 8--Continued
GOLD: WORLD MINE PRODUCTION, BY COUNTRY^{1,2}

(Kilograms)

Country	1999	2000	2001	2002	2003 ^e
Namibia	2,005	2,417	2,706 ^r	2,644 ^r	2,425 ³
New Zealand	8,577	9,880 ^r	9,885	9,770	9,500
Nicaragua	4,448 ^r	3,673 ^r	3,840 ^r	3,904 ^r	3,900
Niger	21 ^r	25 ^r	30 ^r	28 ^r	30
Nigeria ^e	40 ^r	52 ^{r,3}	37 ^{r,3}	40 ^r	50
Oman	597 ^r	551 ^r	603 ^r	188 ^r	100
Panama ^e	1,500	1,500	1,500	1,500 ^r	1,550
Papua New Guinea	65,747	74,540	67,043	65,200	64,000
Peru ¹¹	128,486	132,585	138,022	157,013	171,551 ³
Philippines	31,031	36,540	33,840	40,000	38,000
Poland	489	367	349	296 ^r	300
Romania ^e	3,500 ^r	3,500 ^r	3,500 ^r	3,000 ^r	3,000
Russia	125,870	143,000	152,500	168,411 ^{r,12}	170,068 ^{3,12}
Rwanda	10	10	10 ^e	10 ^e	10
Saudi Arabia ^e	4,570 ³	3,800	5,000	4,192 ^{r,3}	8,769 ³
Senegal ^e	550	550	550	550	550
Serbia and Montenegro ^e	1,260	1,121 ³	1,100	1,100	1,100
Sierra Leone ¹³	-- ^r	-- ^r	-- ^r	-- ^r	--
Slovakia	363	306	157 ^r	77 ^r	75
Solomon Islands	3,456	338	300 ^e	100 ^e	100
South Africa	451,300	430,800	394,800	395,173 ^r	375,787 ³
Spain	5,081	4,310	3,300	3,600 ^e	3,300
Sudan	5,566	5,774	5,417	5,239 ^r	5,000
Suriname ^e	300	300 ¹⁴	300	300	300
Sweden	4,400	3,570	4,986	4,500 ^r	4,300
Taiwan	13	9	2	-- ^e	--
Tajikistan ^e	2,700	2,700	2,700	2,700	2,700
Tanzania	4,767	15,060	30,088	37,000 ^{r,e}	46,000
Thailand	--	--	320	4,950	4,400
Turkey ^e	1,200	500	2,000	2,400 ^{r,e}	2,350
Uganda	5	56	(10)	3 ^r	5
United States	341,000	353,000	335,000	298,000	277,000 ³
Uruguay	2,400 ^e	2,177 ^r	2,083	2,079 ^r	1,730 ³
Uzbekistan	85,000	85,000 ^e	87,000 ^e	90,000	90,000
Venezuela	5,946	7,332	9,076	9,465 ^r	10,000
Vietnam ^e	1,500	2,000	3,000	3,000	3,000
Zambia ^e	700	600	-- ^r	-- ^r	--
Zimbabwe	27,666	22,070	18,050	15,469	12,564 ³
Total	2,570,000	2,590,000	2,600,000	2,580,000 ^r	2,590,000

^eEstimated. ^rRevised. -- Zero.

¹World totals, U.S. data, and estimated data are rounded to no more than three significant digits; may not add to totals shown.

²Table includes data available through August 7, 2004.

³Reported figure.

⁴Officially reported figures are as follows, in kilograms: Major companies: 1999--42,367; 2000--42,025; 2001--46,001; 2002--32,886 (revised); 2003--43,000 (estimated); garimpos: 1999--10,267; 2000--8,368; 2001--5,866 (revised); 2002--5,000 (revised); and 2003--5,000 (estimated).

⁵Includes undocumented artisanal production.

⁶Year ending July 7 of that stated.

⁷Undocumented artisanal production.

⁸Refinery output.

⁹Excludes production from so-called people's mines, which may be as much as 18,000 kilograms per year, but includes gold recovered as byproduct of copper mining.

¹⁰Less than 1/2 unit.

¹¹Includes documented production from placer artisanal production.

¹²Mine output including gold recovered as a byproduct, but excludes secondary gold production, which for Russia in 2002-03 was 2,546 kilograms and 6,835 kilograms, respectively.

¹³Data are based on official exports and do not reflect gold moved through undocumented channels.

¹⁴Government estimates unreported production as high as 30,000 kilograms.