



# Mineral Industry Surveys

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## For information, contact:

Earle B. Amey, Gold Commodity Specialist  
Henry E. Hilliard, Silver and Platinum-Group Metals  
Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4969 (Gold),  
(703) 648-4970 (Silver and PGM)  
Fax: (703) 648-7757  
E-mail: eamey@usgs.gov and hhiliard@usgs.gov

Mahbood Mahdvi (Data)  
Telephone: (703) 648-7778  
Fax: (703) 648-7975  
E-mail: mmahdavi@usgs.gov  
Wanda G. Wooten (Data)  
Telephone: (703) 648-4980  
Fax: (703) 648-7975  
E-mail: wwooten@usgs.gov

**Internet:** <http://minerals.usgs.gov/minerals>

## PRECIOUS METALS IN JUNE 2003

U.S. mines produced 25,500 kilograms (kg) of gold and 106,000 kg of silver in June 2003. Compared with May 2003, production of gold was up 20% in Nevada, and production of silver was down 4% in Nevada. Table 8 lists the top 30 gold-producing mines in the United States for the first 6 months of 2003.

### Gold

**Domestic.** The U.S. Bureau of Land Management approved the expansion of the leach pad at the Florida Canyon gold mine in Nevada to a height of 91 meters (300 feet) from 61 meters (200 feet). Apollo Gold Inc., which owns Florida Canyon reported that 3 more years of gold mining remained, and that the additional leach pad height should suffice. The mine is expected to produce 3,700 kg (120,000 troy ounces) of gold in 2003. Apollo Gold's other gold mine, Montana Tunnels in Montana, has been ramping up to produce between 2,500 kg (80,000 ounces) and 1,850 kg (60,000 ounces) in 2003 (Platts Metals Week, 2003a).

AngloGold Ltd. and Meridian Gold Inc. agreed to sell their 70% and 30% interest, respectively, in the Jerritt Canyon gold mine in Nevada to Queenstake Resources Inc. (Canada) for \$15.72 million through equity financing (Mining Journal, 2003b).

Placer Dome Inc. doubled the measured and indicated resource estimate for its Cortez Hills gold deposit (NV). The new estimate put resources in the measured category at 10 million metric tons (Mt) with 4.05 grams per metric ton (g/t) gold, and in the indicated category at 28.5 Mt with 3.50 g/t gold using 0.14 g/t gold as a cut-off grade. The deposit, which is 60% owned by Placer, is one of the most significant discoveries in Nevada in recent years (Mining Journal, 2003c).

**International.** Brazil's Cia Vale do Rio Doce Ltd. (CVRD) agreed to purchase Yamana Resources Ltd.'s Fazenda Brasileiro gold mine for \$20.9 million. The mine, which is located in Bahia State in northeastern Brazil, has been operated by CVRD

for more than 15 years. It produced about 3,500 kg (112,000 ounces) of gold in 2002 and is expected to operate for 7 more years (American Metal Market, 2003a).

Randgold Resources Ltd. put in a bid for Ashanti Goldfields counter to the bid made by AngloGold Ltd. AngloGold is in merger discussions to buy the Ghana-based Ashanti for about \$1 billion in stock. The deal would bring AngloGold near to again being the world's number one gold producer with a projected annual gold production of 230,000 kg (7.5 million troy ounces) (Platts Metals Week, 2003a).

Union representatives of South Africa began biannual pay negotiations seeking a 20% wage increase. The National Union of Mineworkers (NUM) is representing 200,000 gold and coal miners. Workers want to share in the profits achieved by South African gold producers in 2002 through the rising price of gold. On the other hand, producers had to deal with the rising value of the South African rand that reduced profits because of their U.S. dollar denominated gold sales. Producers claim that NUM's wage demands could lead to financial losses and job reductions (American Metal Market, 2003a).

### Silver

During the last week in May, Sunshine Precious Metals Inc., owners of the Sunshine silver mine in Idaho, filed for bankruptcy protection in advance of the deadline for paying several hundred thousand dollars in past-due property taxes. The majority owner of Sunshine Precious Metals is American Reclamation Inc. of Nevada, which bought the company in February. On June 11, Sunshine Precious Metals announced the sale of its operational rights to Sunshine to Sterling Mining Company for about \$253,000 to cover back property taxes and annual lease payments of \$350,000 per year for the next 15 years. The deal gives Sterling a 15-year operating lease on the mine with an option to purchase the mine set between \$3 and \$4 million, depending on the prevailing silver price. A final decision on Sunshine's future is a few months away, but the

CEO of Sterling said that the company plans to reopen the mine. When it was closed in November 2001, Sunshine, the region's most historically productive silver mine, had reserves of 5,300 t of silver and was producing 160 to 190 metric tons of silver per year through a 1,000-ton-per-day mill (Platts Metals Week, 2003c).

### **Platinum-Group Metals**

On June 5, the Defense National Stockpile Center (DNSC) announced the aggregated May 2003 PGM sales results under the Basic Ordering Agreement, DLA-PGM-002. During May, DNSC sold 6.23 kg of iridium and 903.3 kg of palladium for an overall value of approximately \$5 million. Companies that were awarded material are Standard Bank London, New York, NY; Johnson Matthey, Inc., Wayne, PA; Engelhard Corp., Iselin, NJ; and PGM Trading Corp., New York, NY. For information on PGM sales call DNSC at (703) 767-5488 (Defense National Stockpile Center, 2003).

The Stillwater Mining Company, Columbus, MT, announced on June 23 that it had closed a stock purchase agreement with Russian nickel and palladium miner MMC Norilsk Nickel completing, as expected, Norilsk's acquisition of a 51% stake in Stillwater. Stillwater is the only domestic primary PGM producer and Norilsk is the world's leading producer of palladium. The structure of the sale, including physical palladium, was driven partly by Norilsk's growing stockpile of the metal during a period of weak demand and the company's desire to open a supply line to U.S. markets. Stillwater has marketing relationships with the major U.S. motor vehicle manufacturers, but has struggled to expand its own operations. The metal included in the deal is intended to be the start of a long-term marketing effort of Norilsk's palladium through Stillwater, reaching up to 31,100 kg per year with the added benefit of building consumer confidence in Russian supplies. Interruptions in supplies from Russia have been a concern of consumers for more than 5 years and are one of the main reasons for the decrease in palladium demand. The fall in the price of palladium has reduced the value of the deal since it was

first announced. The cash component is unchanged, but the value of the palladium component has fallen from \$241 million at the time of the proposal in November 2002 to \$163 million on the day the sale was approved by Stillwater shareholders (June 23). Since the sale, the price of shares in Stillwater has fallen about 16%. The lower price of Stillwater shares and the subdued outlook for palladium make it likely that a part of Norilsk's original offer that allows Norilsk to increase its interest in Stillwater will be triggered. That part of the deal committed Norilsk to make an offer of \$7.50 per share in cash for up to 10% of the existing shares in Stillwater, provided that the trading price of Stillwater is below that level for 15 days after the deal is closed; Norilsk's shareholding in Stillwater would then increase to 56% (Mining Journal, 2003a; Stillwater Mining Company, 2003).

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- Mining Journal, 2003a, Approvals for Norilsk's Stillwater offer: Mining Journal, v. 340, no. 8741, June 20, p. 411-412.
- Mining Journal, 2003b, Jerritt Canyon deal agreed: Mining Journal, v. 340, no. 8739, June 6, p. 386.
- Mining Journal, 2003c, Placer expands Cortez Hills resource: Mining Journal, v. 340, no. 8740, June 13, p. 400.
- Platts Metals Week, 2003a, BLM OK's Florida Canyon gold expansion: Platts Metals Week, v. 74, no. 23, June 9, p. 4.
- Platts Metals Week, 2003b, Randgold bids for Ashanti Gold fields: Platts Metals Week, v. 74, no. 22, June 2, p. 9.
- Platts Metals Week, 2003c, Sunshine sells right to silver mine: Platts Metals Week, v. 74, no. 24, June 16, p. 10.
- Stillwater Mining Company, 2003, Stillwater, MMC Norilsk Nickel complete largest Russian-American acquisition: Columbus, MT, Stillwater Mining Company press release, June 23, 2 p.

TABLE 1  
MINE PRODUCTION OF RECOVERABLE GOLD AND SILVER IN THE UNITED STATES, BY STATE <sup>1</sup>

(Kilograms)

| Gold                          | Alaska  | California         | Nevada <sup>r</sup> | Other States <sup>r,2</sup> | Total <sup>r</sup>  |
|-------------------------------|---------|--------------------|---------------------|-----------------------------|---------------------|
| <b>2002:</b>                  |         |                    |                     |                             |                     |
| June                          | W       | 907                | 21,000              | 3,790                       | 25,700              |
| July                          | W       | 770                | 19,500              | 3,880                       | 24,200              |
| August                        | W       | 742 <sup>r</sup>   | 19,600              | 3,420                       | 23,700              |
| September                     | W       | 709 <sup>r</sup>   | 20,800              | 4,160                       | 25,600              |
| October                       | W       | 569                | 21,400              | 4,350                       | 26,300              |
| November                      | W       | 519 <sup>r</sup>   | 19,400              | 4,090                       | 24,000              |
| December                      | W       | 534                | 22,800              | 4,350                       | 27,700              |
| January-December              | W       | 9,180 <sup>r</sup> | 240,000             | 48,500                      | 298,000             |
| <b>2003:</b>                  |         |                    |                     |                             |                     |
| January                       | W       | 507                | 18,700              | 3,620                       | 22,900              |
| February                      | W       | 476                | 16,600              | 3,210                       | 20,300              |
| March                         | W       | 445                | 17,600              | 3,950                       | 22,000              |
| April                         | W       | 462                | 15,800              | 3,710                       | 20,000              |
| May                           | W       | 434                | 17,400              | 3,500 <sup>r</sup>          | 21,300 <sup>r</sup> |
| June                          | W       | 418                | 20,900              | 4,120                       | 25,500              |
| January-June                  | W       | 2,740              | 107,000             | 22,100                      | 132,000             |
| Silver                        | Arizona | Idaho              | Nevada              | Other States <sup>3</sup>   | Total               |
| <b>2002:</b>                  |         |                    |                     |                             |                     |
| June                          | W       | W                  | 30,800              | 84,700                      | 115,000             |
| July                          | W       | W                  | 35,100              | 78,300                      | 113,000             |
| August                        | W       | W                  | 28,400              | 79,700                      | 108,000             |
| September                     | W       | W                  | 30,200              | 78,700                      | 109,000             |
| October                       | W       | W                  | 38,100              | 86,100                      | 124,000             |
| November                      | W       | W                  | 24,200              | 81,000                      | 105,000             |
| December                      | W       | W                  | 32,600              | 81,400                      | 114,000             |
| January-December <sup>p</sup> | W       | W                  | 424,000             | 996,000                     | 1,420,000           |
| <b>2003:</b>                  |         |                    |                     |                             |                     |
| January                       | W       | W                  | 24,700              | 81,400                      | 106,000             |
| February                      | W       | W                  | 19,600              | 75,300                      | 94,800              |
| March                         | W       | W                  | 25,800              | 83,400                      | 109,000             |
| April                         | W       | W                  | 21,500              | 72,800                      | 94,300              |
| May                           | W       | W                  | 27,700              | 79,200 <sup>r</sup>         | 107,000             |
| June                          | W       | W                  | 26,600              | 79,800                      | 106,000             |
| January-June                  | W       | W                  | 146,000             | 472,000                     | 618,000             |

<sup>p</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included with "Other States."

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

<sup>2</sup>Includes Arizona, Colorado, Idaho, Montana, New Mexico, South Carolina, South Dakota, Utah, Washington, and State indicated by symbol W.

<sup>3</sup>Includes Alaska, California, Colorado, Missouri, Montana, New Mexico, New York, South Carolina, South Dakota, Tennessee, Utah, Washington, and States indicated by symbol W.

TABLE 2  
SELECTED PRECIOUS METAL PRICES

(Dollars per troy ounce)

|                                  | Gold               | Silver                  | Platinum           | Palladium          |
|----------------------------------|--------------------|-------------------------|--------------------|--------------------|
| <u>Engelhard Industries:</u>     |                    |                         |                    |                    |
| 2002:                            |                    |                         |                    |                    |
| Low/date                         | 278.62 January 29  | 4.26 January 31         | 454.00 February 1  | 225.00 December 23 |
| High/date                        | 350.54 December 27 | 5.15 June 4 and July 15 | 610.00 December 17 | 439.00 January 3   |
| Average                          | 311.33             | 4.62                    | 542.56             | 339.68             |
| 2003:                            |                    |                         |                    |                    |
| April:                           |                    |                         |                    |                    |
| Low/date                         | 321.09/7           | 4.42/2                  | 605.00/30          | 151.00/16          |
| High/date                        | 337.97/30          | 4.67/24                 | 644.00/22          | 182.00/1           |
| Average                          | 329.51             | 4.54                    | 627.19             | 164.76             |
| May:                             |                    |                         |                    |                    |
| Low/date                         | 341.73/2           | 4.57/29 and 30          | 608.00/1, 2, and 5 | 155.00/1           |
| High/date                        | 372.68/27          | 4.90/14                 | 686.00/27          | 198.00/27          |
| Average                          | 356.31             | 4.76                    | 651.43             | 168.90             |
| June:                            |                    |                         |                    |                    |
| Low/date                         | 345.08/26          | 4.49/10                 | 647.00/2           | 172.00/9           |
| High/date                        | 368.02/5           | 4.66/17                 | 678.00/19          | 192.00/3           |
| Average                          | 357.61             | 4.56                    | 664.19             | 181.76             |
| Year to date:                    |                    |                         |                    |                    |
| Low/date                         | 321.09 April 7     | 4.39 March 24           | 605.00 April 30    | 151.00 April 16    |
| High/date                        | 383.40 February 5  | 4.94 January 6 and 24   | 709.00 March 10    | 273.00 January 23  |
| Average                          | 350.70             | 4.66                    | 656.24             | 209.32             |
| <u>Handy and Harman:</u>         |                    |                         |                    |                    |
| 2002, Average                    | 310.13             | 4.62                    | XX                 | XX                 |
| 2003:                            |                    |                         |                    |                    |
| April                            | 328.25             | 4.54                    | XX                 | XX                 |
| May                              | 355.03             | 4.75                    | XX                 | XX                 |
| June                             | 356.35             | 4.56                    | XX                 | XX                 |
| Average year to date             | 349.45             | 4.65                    | XX                 | XX                 |
| <u>London Final:<sup>1</sup></u> |                    |                         |                    |                    |
| 2002, Average                    | 309.97             | 4.60                    | XX                 | XX                 |
| 2003:                            |                    |                         |                    |                    |
| April                            | 328.18             | 4.49                    | XX                 | XX                 |
| May                              | 355.68             | 4.74                    | XX                 | XX                 |
| June                             | 356.35             | 4.53                    | XX                 | XX                 |
| Average year to date             | 349.43             | 4.63                    | XX                 | XX                 |

XX Not applicable.

<sup>1</sup>Silver price reported as "London Spot/US Equiv."

Source: Platts Metals Week.

TABLE 3  
U.S. IMPORTS AND EXPORTS OF GOLD<sup>1</sup>

(Kilograms of gold content, unless otherwise specified)

| Period and country              | Ores and concentrates <sup>2</sup> | Doré and precipitates | Refined bullion <sup>3</sup> | Ash and residues | Total <sup>4</sup> | Waste and scrap (gross weight) | Metal powder (gross weight) | Gold compounds (gross weight) |
|---------------------------------|------------------------------------|-----------------------|------------------------------|------------------|--------------------|--------------------------------|-----------------------------|-------------------------------|
| <b>Imports for consumption:</b> |                                    |                       |                              |                  |                    |                                |                             |                               |
| 2002                            | 2,720                              | 42,200                | 172,000                      | --               | 217,000            | 11,900                         | 10,700                      | 18,100                        |
| <b>2003:</b>                    |                                    |                       |                              |                  |                    |                                |                             |                               |
| March                           | 30                                 | 6,430                 | 9,160                        | --               | 15,600             | 955                            | 243                         | 8,140                         |
| April                           | 1                                  | 7,290                 | 11,800                       | --               | 19,100             | 801                            | 600                         | 1,670                         |
| <b>May:</b>                     |                                    |                       |                              |                  |                    |                                |                             |                               |
| Aruba                           | --                                 | --                    | 125                          | --               | 125                | --                             | --                          | --                            |
| Brazil                          | --                                 | --                    | 1,110                        | --               | 1,110              | 1                              | --                          | --                            |
| Canada                          | 73                                 | --                    | 8,240                        | --               | 8,310              | 159                            | 1                           | --                            |
| Chile                           | --                                 | --                    | 600                          | --               | 600                | --                             | --                          | --                            |
| Colombia                        | --                                 | 5,700                 | 547                          | --               | 6,250              | 50                             | 3                           | --                            |
| Dominican Republic              | --                                 | --                    | 9                            | --               | 9                  | 532                            | 7                           | --                            |
| Germany                         | --                                 | --                    | 92                           | --               | 92                 | --                             | (5) <sup>6</sup>            | 847 <sup>6</sup>              |
| Honduras                        | --                                 | 427                   | --                           | --               | 427                | --                             | 462                         | --                            |
| Japan                           | --                                 | --                    | --                           | --               | --                 | --                             | --                          | 2,860 <sup>6</sup>            |
| Mexico                          | --                                 | 190                   | 455                          | --               | 645                | 78                             | --                          | --                            |
| Nicaragua                       | --                                 | 111                   | --                           | --               | 111                | --                             | --                          | --                            |
| Peru                            | --                                 | 1,820                 | --                           | --               | 1,820              | --                             | --                          | --                            |
| Other                           | 9                                  | 35                    | 238                          | --               | 282                | 217                            | 44 <sup>6</sup>             | --                            |
| Total                           | 82                                 | 8,290                 | 11,400                       | --               | 19,800             | 1,040                          | 519                         | 3,710                         |
| Year to date                    | 232                                | 35,100                | 56,200                       | --               | 91,500             | 4,910                          | 2,320                       | 20,900                        |
| <b>Exports:</b>                 |                                    |                       |                              |                  |                    |                                |                             |                               |
| 2002                            | 556                                | 71,700                | 185,000                      | --               | 257,000            | 85,800                         | 10,900                      | 417,000                       |
| <b>2003:</b>                    |                                    |                       |                              |                  |                    |                                |                             |                               |
| March                           | 81                                 | 3,230                 | 15,100                       | --               | 18,400             | 17,900                         | 68                          | 48,400                        |
| April                           | 20                                 | 7,400                 | 18,600                       | --               | 26,000             | 6,790                          | 112                         | 25,100                        |
| <b>May:</b>                     |                                    |                       |                              |                  |                    |                                |                             |                               |
| Armenia                         | --                                 | 19                    | 42                           | --               | 61                 | --                             | 20                          | --                            |
| Australia                       | --                                 | --                    | --                           | --               | --                 | --                             | --                          | 426 <sup>6</sup>              |
| Belgium                         | 1                                  | --                    | --                           | --               | 1                  | 51                             | --                          | --                            |
| Canada                          | --                                 | --                    | 45                           | --               | 45                 | 4,860                          | --                          | 27,600 <sup>6</sup>           |
| Dominican Republic              | 70                                 | --                    | --                           | --               | 70                 | --                             | --                          | --                            |
| Germany                         | --                                 | --                    | --                           | --               | --                 | 273                            | 9 <sup>6</sup>              | --                            |
| Guatemala                       | --                                 | --                    | --                           | --               | --                 | 231                            | --                          | --                            |
| Hong Kong                       | --                                 | --                    | 9                            | --               | 9                  | --                             | --                          | 683 <sup>6</sup>              |
| Israel                          | --                                 | (5)                   | --                           | --               | (5)                | --                             | 2                           | 9,790 <sup>6</sup>            |
| Italy                           | 4                                  | --                    | --                           | --               | 4                  | --                             | --                          | --                            |
| Japan                           | --                                 | 1                     | 2                            | --               | 3                  | 26                             | 1                           | --                            |
| Mexico                          | --                                 | --                    | 1,670                        | --               | 1,670              | --                             | --                          | --                            |
| Netherlands                     | --                                 | --                    | --                           | --               | --                 | --                             | --                          | 649 <sup>6</sup>              |
| Peru                            | --                                 | --                    | 271                          | --               | 271                | --                             | --                          | --                            |
| Switzerland                     | --                                 | 10,000                | 13,100                       | --               | 23,100             | --                             | --                          | --                            |
| United Arab Emirates            | --                                 | --                    | 1,050                        | --               | 1,050              | --                             | --                          | --                            |
| United Kingdom                  | 10                                 | --                    | 8,230                        | --               | 8,240              | 6,130                          | 98                          | 4,010 <sup>6</sup>            |
| Venezuela                       | --                                 | --                    | --                           | --               | --                 | --                             | --                          | 186 <sup>6</sup>              |
| Other                           | --                                 | --                    | 207                          | --               | 207                | 8                              | 7                           | --                            |
| Total                           | 85                                 | 10,000                | 24,600                       | --               | 34,700             | 11,600                         | 136                         | 43,300                        |
| Year to date                    | 342                                | 38,100                | 87,700                       | --               | 126,000            | 66,100                         | 453                         | 198,000                       |

-- Zero.

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

<sup>2</sup>Includes gold content of base metal ores, concentrates, and matte imported for refining.

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

<sup>4</sup>"Waste and scrap," "Metal powder," and "Gold compounds" not included in "Total."

<sup>5</sup>Less than 1/2 unit.

<sup>6</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF SILVER<sup>1</sup>

(Kilograms of silver content, unless otherwise specified)

| Period and country | Bullion             | Doré                | Ores and concentrates <sup>2</sup> | Ash and residues   | Total     | Other unwrought silver (gross weight) | Metal powder (gross weight) | Silver nitrate (gross weight) | Semimanufactured form <sup>3</sup> (gross weight) | Waste and scrap (gross weight) |
|--------------------|---------------------|---------------------|------------------------------------|--------------------|-----------|---------------------------------------|-----------------------------|-------------------------------|---|--------------------------------|
| 2002               | 4,020,000           | 16,600              | 61,000                             | 63,500             | 4,160,000 | 263,000                               | 12,100                      | 572                           | 289,000   | 816,000                        |
| 2003:              |                     |                     |                                    |                    |           |                                       |                             |                               |   |                                |
| March              | 211,000             | 18,800              | 350                                | 6,830              | 237,000   | 19,600                                | 647                         | --                            | 18,300  | 44,200                         |
| April              | 319,000             | 20,100              | --                                 | 9,860              | 349,000   | 73,800                                | 1,760                       | 224                           | 30,300  | 206,000                        |
| May:               |                     |                     |                                    |                    |           |                                       |                             |                               |   |                                |
| Australia          | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | --  | 91                             |
| Brazil             | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | 20,500  | 4                              |
| Canada             | 41,500 <sup>4</sup> | --                  | 722 <sup>4</sup>                   | 7,400 <sup>4</sup> | 49,600    | 186 <sup>4</sup>                      | 146                         | --                            | 1,440 <sup>4</sup>                                | 36,900                         |
| Chile              | 6,000               | --                  | --                                 | --                 | 6,000     | --                                    | --                          | --                            | --  | 20                             |
| China              | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | --  | 88                             |
| Dominican Republic | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | --  | 113                            |
| France             | --                  | --                  | --                                 | --                 | --        | 63 <sup>4</sup>                       | 450                         | --                            | 156   | --                             |
| Germany            | --                  | --                  | --                                 | --                 | --        | --                                    | 632                         | --                            | 1,480 <sup>4</sup>                                | 13                             |
| India              | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | 922   | 54                             |
| Italy              | --                  | --                  | --                                 | --                 | --        | (5) <sup>4</sup>                      | --                          | --                            | 990 <sup>4</sup>                                  | 16                             |
| Jamaica            | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | --  | 91                             |
| Japan              | --                  | --                  | --                                 | --                 | --        | --                                    | 195                         | --                            | 454 <sup>4</sup>                                  | 11                             |
| Korea, Republic of | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | 657   | --                             |
| Malaysia           | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | --  | 18,700                         |
| Mexico             | 152,000             | 19,000 <sup>4</sup> | --                                 | 610                | 171,000   | 19,300 <sup>4</sup>                   | --                          | 362                           | 150   | 1,800                          |
| Peru               | 50,600              | --                  | --                                 | --                 | 50,600    | --                                    | --                          | --                            | --  | --                             |
| Philippines        | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | --  | 3,450                          |
| Poland             | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | 1,300   | --                             |
| Singapore          | --                  | --                  | --                                 | 129                | 129       | --                                    | --                          | --                            | --  | 6                              |
| Sweden             | 1,560               | --                  | --                                 | --                 | 1,560     | --                                    | --                          | --                            | --  | --                             |
| Switzerland        | --                  | --                  | --                                 | --                 | --        | --                                    | 151                         | --                            | --  | --                             |
| Taiwan             | --                  | --                  | --                                 | --                 | --        | --                                    | --                          | --                            | 108   | 229                            |
| United Kingdom     | --                  | --                  | --                                 | 1,900              | 1,900     | --                                    | --                          | --                            | 212   | 2,110                          |
| Other              | 5 <sup>4</sup>      | --                  | --                                 | --                 | 5         | --                                    | --                          | --                            | --  | 66                             |
| Total              | 251,000             | 19,000              | 722                                | 10,000             | 281,000   | 19,500                                | 1,570                       | 362                           | 28,400  | 63,700                         |
| Year to date       | 1,490,000           | 82,800              | 1,070                              | 34,300             | 1,610,000 | 154,000                               | 6,830                       | 600                           | 140,000   | 435,000                        |

-- Zero.

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

<sup>2</sup>Includes silver content of base metal ores and concentrates.

<sup>3</sup>Containing 99.5% or more by weight of silver.

<sup>4</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

<sup>5</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF SILVER<sup>1</sup>

(Kilograms of silver content, unless otherwise specified)

| Period and country | Bullion | Doré   | Ores and concentrates <sup>2</sup> | Total   | Other unwrought silver (gross weight) | Metal powder (gross weight) | Silver nitrate (gross weight) | Semimanufactured form <sup>3</sup> (gross weight) | Waste and scrap (gross weight) |
|--------------------|---------|--------|------------------------------------|---------|---------------------------------------|-----------------------------|-------------------------------|---|--------------------------------|
| 2002               | 624,000 | 22,700 | 230,000                            | 877,000 | 32,700                                | 360,000                     | 81,200                        | 290,000   | 2,380,000                      |
| 2003:              |         |        |                                    |         |                                       |                             |                               |   |                                |
| March              | 22,400  | 1,150  | 35                                 | 23,600  | 1,050                                 | 28,300                      | 8,890                         | 37,400  | 224,000                        |
| April              | 19,700  | 1,590  | 17,300                             | 38,600  | 3,530                                 | 38,400                      | 7,590                         | 56,800  | 179,000                        |
| May:               |         |        |                                    |         |                                       |                             |                               |   |                                |
| Belgium            | --      | --     | --                                 | --      | 56                                    | 107                         | --                            | 253   | 13,200                         |
| Brazil             | --      | --     | --                                 | --      | --                                    | --                          | --                            | 888   | 107                            |
| Canada             | 121     | --     | --                                 | 121     | 213 <sup>4</sup>                      | 692                         | 4,460                         | 3,550   | 87,700                         |
| China              | --      | --     | --                                 | --      | --                                    | --                          | --                            | 278   | 27,200                         |
| France             | --      | --     | --                                 | --      | --                                    | 1,360                       | --                            | 1,170   | --                             |
| Germany            | --      | --     | --                                 | --      | 41 <sup>4</sup>                       | 8,060                       | --                            | 1,080   | 10,700                         |
| Hong Kong          | --      | --     | --                                 | --      | 43 <sup>4</sup>                       | 3,220                       | --                            | 28  | --                             |
| India              | --      | --     | --                                 | --      | --                                    | --                          | --                            | --  | 190                            |
| Israel             | --      | --     | --                                 | --      | --                                    | 111                         | --                            | 157   | --                             |
| Italy              | --      | --     | --                                 | --      | --                                    | 8 <sup>4</sup>              | --                            | 45  | 9,270                          |
| Japan              | --      | --     | 218 <sup>4</sup>                   | 218     | 2 <sup>4</sup>                        | 3,220                       | --                            | 7,000   | 36,700                         |
| Korea, Republic of | --      | --     | --                                 | --      | 14                                    | 2,430                       | --                            | 5,570   | 886                            |
| Malaysia           | --      | --     | --                                 | --      | --                                    | --                          | --                            | 171   | --                             |
| Mexico             | 6,720   | --     | --                                 | 6,720   | --                                    | 716                         | 324                           | 1,260   | --                             |
| Netherlands        | --      | --     | --                                 | --      | --                                    | 826                         | --                            | 395   | --                             |
| Philippines        | --      | --     | --                                 | --      | --                                    | --                          | --                            | 145   | --                             |
| Poland             | --      | --     | --                                 | --      | --                                    | --                          | --                            | 172   | --                             |
| Saudi Arabia       | --      | --     | --                                 | --      | --                                    | --                          | --                            | --  | 5,590                          |
| Singapore          | --      | --     | --                                 | --      | --                                    | 40                          | --                            | 150   | 226                            |
| Spain              | --      | --     | --                                 | --      | --                                    | --                          | --                            | 2,460   | --                             |
| Sweden             | --      | --     | --                                 | --      | --                                    | --                          | --                            | 16  | 19,100                         |
| Switzerland        | --      | 1,190  | --                                 | 1,190   | --                                    | 30                          | --                            | 60  | --                             |
| Taiwan             | --      | --     | --                                 | --      | 15                                    | 7,270                       | 187                           | 373   | --                             |
| United Kingdom     | 585     | --     | --                                 | 585     | 157                                   | 3,400                       | --                            | 1,530 <sup>4</sup>                                | 222                            |
| Venezuela          | --      | --     | --                                 | --      | --                                    | --                          | --                            | --  | 120                            |
| Other              | --      | --     | 28                                 | 28      | 364                                   | --                          | --                            | 139   | 225                            |
| Total              | 7,420   | 1,190  | 246                                | 8,860   | 906                                   | 31,500                      | 4,970                         | 26,900  | 212,000                        |
| Year to date       | 82,200  | 8,930  | 57,500                             | 159,000 | 9,570                                 | 168,000                     | 30,600                        | 170,000   | 941,000                        |

-- Zero.

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

<sup>2</sup>Includes silver content of base metal ores and concentrates.

<sup>3</sup>Semimanufactured (including silver plated with gold or platinum) forms of silver.

<sup>4</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM-GROUP METALS <sup>1</sup>

(Kilograms of metal content)

| Period and country | Platinum grain and nuggets | Platinum sponge | Other unwrought platinum | Platinum, other | Platinum waste and scrap | Platinum coins | Unwrought palladium | Palladium, other | Iridium <sup>2</sup> | Unwrought osmium | Unwrought ruthenium | Rhodium <sup>3</sup> |
|--------------------|----------------------------|-----------------|--------------------------|-----------------|--------------------------|----------------|---------------------|------------------|----------------------|------------------|---------------------|----------------------|
| 2002               | 1,910                      | 72,600          | 3,490                    | 4,950           | 77,500                   | 20             | 94,600              | 22,000           | 2,100                | 36               | 9,890               | 8,630                |
| 2003:              |                            |                 |                          |                 |                          |                |                     |                  |                      |                  |                     |                      |
| March              | 142                        | 4,670           | 773                      | 366             | 3,750                    | --             | 4,930               | 1,930            | 217                  | 5                | 1,480               | 571                  |
| April              | 61                         | 6,430           | 731                      | 424             | 3,190                    | 6              | 5,720               | 2,660            | 235                  | 4                | 2,960               | 1,520                |
| May:               |                            |                 |                          |                 |                          |                |                     |                  |                      |                  |                     |                      |
| Belgium            | --                         | 395             | --                       | --              | 3                        | --             | 229                 | 31 <sup>4</sup>  | --                   | --               | --                  | 75                   |
| Brazil             | --                         | --              | --                       | --              | 1                        | --             | --                  | --               | --                   | --               | --                  | --                   |
| Canada             | 3                          | --              | --                       | 23              | 20                       | --             | 188                 | --               | --                   | --               | --                  | --                   |
| Chile              | --                         | --              | --                       | --              | 21                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| China              | --                         | --              | 49                       | --              | 63                       | --             | 37                  | --               | --                   | --               | --                  | --                   |
| Colombia           | --                         | --              | --                       | --              | 17                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| France             | --                         | --              | 50                       | 5               | --                       | --             | --                  | 1 <sup>4</sup>   | --                   | --               | --                  | --                   |
| Germany            | --                         | 42              | --                       | 324             | 881                      | --             | 256                 | 247              | 4                    | --               | 8                   | (5) <sup>4</sup>     |
| Hong Kong          | --                         | --              | --                       | (5)             | --                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| India              | --                         | --              | --                       | (5)             | --                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| Israel             | --                         | --              | 47                       | --              | --                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| Italy              | --                         | 2               | --                       | 89              | --                       | --             | --                  | 147              | --                   | --               | --                  | --                   |
| Japan              | --                         | 12              | 1                        | --              | 4,310                    | --             | 160                 | 50               | --                   | --               | --                  | --                   |
| Korea, Republic of | --                         | --              | --                       | --              | 4                        | --             | --                  | --               | --                   | --               | --                  | --                   |
| Mexico             | --                         | --              | --                       | --              | 6                        | --             | --                  | --               | --                   | --               | --                  | --                   |
| Netherlands        | --                         | --              | --                       | (5)             | --                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| Norway             | --                         | 38              | --                       | --              | --                       | --             | 577                 | 30               | --                   | --               | --                  | 10                   |
| Peru               | --                         | --              | --                       | --              | 29                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| Philippines        | --                         | --              | --                       | 1               | 1                        | --             | --                  | --               | --                   | --               | --                  | --                   |
| Russia             | --                         | 390             | 1,000                    | --              | --                       | --             | 2,530               | 1,120            | --                   | --               | 50                  | 1,220                |
| South Africa       | 13                         | 3,200           | --                       | 21              | --                       | --             | 2,400               | 74               | 179                  | --               | 593                 | 377                  |
| Switzerland        | --                         | --              | 3                        | 27              | --                       | --             | 114                 | 137              | --                   | --               | --                  | --                   |
| United Kingdom     | 16                         | 1,940           | 1                        | 22              | 70                       | --             | 731                 | 480              | 2 <sup>4</sup>       | --               | 7 <sup>4</sup>      | 27                   |
| Venezuela          | --                         | --              | --                       | 2               | 14                       | --             | --                  | --               | --                   | --               | --                  | --                   |
| Total              | 33                         | 6,020           | 1,150                    | 514             | 5,440                    | --             | 7,220               | 2,310            | 186                  | --               | 658                 | 1,710                |
| Year to date       | 487                        | 30,500          | 3,510                    | 2,460           | 18,600                   | 6              | 25,500              | 10,700           | 922                  | 10               | 6,930               | 4,970                |

-- Zero.

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

<sup>2</sup>Unwrought and other forms of iridium.

<sup>3</sup>Unwrought and other forms of rhodium.

<sup>4</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

<sup>5</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.



TABLE 7  
U.S. EXPORTS OF PLATINUM-GROUP METALS <sup>1</sup>

(Kilograms of metal content, unless otherwise specified)

| Period and country   | Palladium <sup>2</sup> | Platinum <sup>2</sup> | Platinum waste and scrap | Iridium, osmium, and ruthenium <sup>2,3</sup> | Rhodium <sup>2</sup> |
|----------------------|------------------------|-----------------------|--------------------------|---|----------------------|
| 2002                 | 42,700                 | 27,800                | 17,700                   | 1,990   | 349                  |
| 2003:                |                        |                       |                          |   |                      |
| March                | 1,940                  | 1,910                 | 2,450                    | 121   | 6                    |
| April                | 2,080                  | 1,680                 | 1,600                    | 72  | 21                   |
| May:                 |                        |                       |                          |   |                      |
| Argentina            | --                     | 2                     | --                       | --  | 2                    |
| Australia            | 28                     | 7                     | --                       | --  | --                   |
| Belgium              | 2                      | 4                     | --                       | --  | --                   |
| Bermuda              | --                     | (4)                   | --                       | --  | --                   |
| Brazil               | 2                      | 2                     | --                       | --  | --                   |
| Canada               | 177                    | 99                    | 221                      | --  | --                   |
| China                | 46                     | --                    | --                       | 3   | --                   |
| Denmark              | 10                     | 1                     | --                       | --  | --                   |
| Finland              | 2                      | --                    | --                       | --  | --                   |
| France               | 21                     | 8                     | --                       | 1   | --                   |
| Germany              | 240 <sup>5</sup>       | 563                   | 72                       | 2 <sup>5</sup>                                | --                   |
| Haiti                | 5                      | --                    | --                       | --  | --                   |
| Hong Kong            | 18                     | 20                    | --                       | --  | --                   |
| Iceland              | 2                      | --                    | --                       | --  | --                   |
| Ireland              | 1                      | 31                    | --                       | --  | --                   |
| Israel               | 8                      | --                    | --                       | 1   | 1 <sup>5</sup>       |
| Italy                | 9                      | 6                     | --                       | --  | --                   |
| Japan                | 172 <sup>5</sup>       | 247                   | --                       | --  | 1 <sup>5</sup>       |
| Korea, Republic of   | --                     | 1 <sup>5</sup>        | --                       | --  | --                   |
| Malaysia             | 2                      | 18                    | --                       | --  | 9                    |
| Mexico               | 5                      | 3                     | --                       | --  | (4) <sup>5</sup>     |
| Netherlands          | 110                    | 11                    | --                       | --  | --                   |
| Netherlands Antilles | 1                      | --                    | --                       | --  | --                   |
| New Zealand          | 15                     | 3                     | --                       | 3   | (4)                  |
| Norway               | 3                      | 13                    | --                       | --  | --                   |
| Philippines          | 2                      | 10                    | --                       | --  | --                   |
| Romania              | --                     | 2                     | --                       | --  | --                   |
| Singapore            | 4                      | 8                     | --                       | --  | --                   |
| Slovenia             | 2                      | --                    | --                       | --  | --                   |
| South Africa         | --                     | 5                     | --                       | --  | --                   |
| Spain                | 10                     | --                    | --                       | --  | --                   |
| Sweden               | 8                      | --                    | --                       | --  | --                   |
| Switzerland          | 58 <sup>5</sup>        | 166                   | 624                      | --  | --                   |
| Taiwan               | 254                    | 27                    | --                       | --  | (4) <sup>5</sup>     |
| Thailand             | 7                      | 5                     | --                       | --  | (4) <sup>5</sup>     |
| Turkey               | --                     | (4)                   | --                       | --  | --                   |
| United Arab Emirates | --                     | --                    | --                       | --  | (4) <sup>5</sup>     |
| United Kingdom       | 400 <sup>5</sup>       | 284                   | 1,390                    | 16 <sup>5</sup>                               | 3 <sup>5</sup>       |
| Total                | 1,620                  | 1,550                 | 2,310                    | 25  | 17                   |
| Year to date         | 8,820                  | 7,960                 | 10,200                   | 358   | 146                  |

-- Zero.

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

<sup>2</sup>Unwrought and other forms.

<sup>3</sup>Gross weight.

<sup>4</sup>Less than 1/2 unit.

<sup>5</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 8  
LEADING GOLD-PRODUCING MINES IN THE UNITED STATES IN THE FIRST HALF OF 2003, IN ORDER  
OF OUTPUT<sup>1</sup>

| Rank | Mine                                   | County and State     | Operator                               | Kilograms |
|------|--|----------------------|--|-----------|
| 1    | Newmont Nevada operations <sup>2</sup> | Various counties, NV | Newmont Gold Company                   | 33,800    |
| 2    | Betze-Post/Goldstrike                  | Eureka, NV           | Barrick Gold Corporation               | 23,000    |
| 3    | Cortez                                 | Lander, NV           | Placer Dome Inc.                       | 17,800    |
| 4    | Round Mountain                         | Nye, NV              | Round Mountain Gold Corporation        | 13,000    |
| 5    | Meikle/Goldstrike                      | Elko, NV             | Barrick Gold Corporation               | 8,130     |
| 6    | Fort Knox <sup>3</sup>                 | Fairbanks, AK        | Fairbanks Gold Mining Inc.             | 5,990     |
| 7    | Jerritt Canyon                         | Elko, NV             | Independence Mining Company, Inc.      | 4,730     |
| 8    | Cresson                                | Teller, CO           | Cripple Creek & Victor Gold Mining Co. | 4,390     |
| 9    | Bingham Canyon <sup>4</sup>            | Salt Lake, UT        | Kennecott Utah Copper Corp.            | 4,170     |
| 10   | Golden Sunlight                        | Jefferson, MT        | Placer Dome Inc.                       | 3,690     |
| 11   | Marigold                               | Humboldt, NV         | Glamis Gold Ltd.                       | 2,030     |
| 12   | Bald Mountain                          | White Pine, NV       | Placer Dome Inc.                       | 1,670     |
| 13   | Greens Creek                           | Juneau, AK           | Kennecott Greens Creek Mining Co.      | 1,560     |
| 14   | Wharf                                  | Lawrence, SD         | Wharf Resources, Ltd.                  | 1,120     |
| 15   | Denton-Rawhide                         | Mineral, NV          | Kennecott Rawhide Mining Co.           | 976       |
| 16   | Rochester                              | Pershing, NV         | Coeur d'Alene Mines Corp.              | 805       |
| 17   | Briggs                                 | Inyo, CA             | Canyon Resources Corp.                 | 798       |
| 18   | Rand                                   | Kern, CA             | Glamis Rand Mining Co.                 | 699       |
| 19   | Barney's Canyon                        | Salt Lake, UT        | Kennecott Barney's Canyon Mining Co.   | 591       |
| 20   | Getchell                               | Humboldt, NV         | Placer Dome Inc.                       | 469       |
| 21   | Illinois Creek <sup>5</sup>            | Yukon-Koyukuk, AK    | American Reclamation Group LLC         | 450       |
| 22   | Castle Mountain                        | San Bernardino, CA   | Viceroy Resources Corporation          | 269       |
| 23   | Beartrack                              | Lemhi, ID            | Meridian Gold Inc.                     | 78        |
| XX   | Bagdad                                 | Yavapai, AZ          | Phelps Dodge Corp.                     | (6)       |
| XX   | Florida Canyon                         | Pershing, NV         | Florida Canyon Mining, Inc.            | (6)       |
| XX   | McCoy/Cove                             | Lander, NV           | Newmont Gold Company                   | (6)       |
| XX   | Mesquite                               | Imperial, CA         | Newmont Gold Company                   | (6)       |
| XX   | Midas                                  | Elko, NV             | Euro-Nevada Mining Co.                 | (6)       |
| XX   | Montana Tunnels                        | Jefferson, MT        | Montana Tunnels Mining, Inc.           | (6)       |
| XX   | Ruby Hill                              | Eureka, NV           | Homestake Mining Company               | (6)       |

XX Not applicable.

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

<sup>2</sup>Includes Battle Mountain Gold, Carlin Mines Complex, Lone Tree, Twin Creeks, and Reona.

<sup>3</sup>Mine production refers to gold equivalent produced.

<sup>4</sup>Mine production refers to total quantity of gold produced in concentrates.

<sup>5</sup>Estimate from State annual report.

<sup>6</sup>Production information for Bagdad, Florida Canyon, McCoy/Cove, Midas, Montana Tunnels, and Ruby Hill is withheld; mines are among the top 30 gold-producing mines in the United States, but are not shown in rank order to avoid disclosing company proprietary data.

Sources: Company quarterly reports, Securities and Exchange Commission's 10Q reports and company news releases.