

# Mineral Industry Surveys

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## PRECIOUS METALS IN JULY 2003

U.S. mines produced 24,900 kilograms (kg) of gold and 99,300 kg of silver in July 2003. Compared with June 2003, production of gold was down 19% in California, and production of silver was up 9% in Nevada.

### Gold

**Domestic.**—Gold and silver exploration in Nevada rose in 2002, and is still rising in 2003. Thirty-three companies that were surveyed by the Nevada Division of Minerals spent \$64.6 million in 2002 compared with \$51.2 million in 2001. This was the first increase in exploration spending in 4 years in Nevada. The companies employed 128 geologists in Nevada during 2002, up from 107 geologists in 2001. In 2003, the companies plan to employ 140 geologists (Platts Metal Market, 2003b).

Newmont Mining Co. (Denver, CO) sold its Mesquite gold mine to Western Goldfields Inc. (Plano, TX) for 1.1 million shares of its stock valued at \$1.75 per share. Newmont retained 50% of the net-profit interest from ore already on the heap leach pads and received a net smelter royalty return ranging from 0.5% to 2% on the newly mined ore. Western Goldfields expects that gold will be produced at least until 2007 at about 1,500 kg (50,000 troy ounces) in 2003 and 2004 and is planning to expand the mine. All reclamation and closure liability will be the responsibility of Western Goldfields (American Metal Market, 2003a).

**International.**—Gold Avenue, which is an e-trading platform established in 2001 by AngloGold Ltd. (South Africa), JP Morgan Investment Bank (United States), and Produits Artistiques de Metaux Precieux (PAMP) (Switzerland), no longer offers brokerage or trading services for gold. However, Gold Avenue may continue to operate as some form of information system for gold. AngloGold and PAMP will provide brokerage services for gold jewelry in the United States (Platts Metals Week, 2003a).

South African gold mines avoided a threatened strike by 100,000 mineworkers. AngloGold Ltd., Gold Fields Ltd., and

Harmony Gold NL—three of South Africa's largest gold producers—agreed to a 10% pay increase with the National Union of Mineworkers, thereby averting what would have been the first major gold mining industry walkout in 16 years. The issue of job classification is to be resolved by the end of 2003 (American Metal Market, 2003b).

The London Bullion Market Association (LBMA) gold clearing statistics fell in June. Gold transfers decreased less than 1% in comparison with those of May, reaching 490,000 kg (15.8 million ounces). The number of gold transfers declined 6% to an average of 788 per day from 838 per day. In comparison with those of June 2002, gold statistics continued to be lower. Last year's average gold price was about 10% below the average in June 2003 (Platts Metals Week, 2003c).

### Silver

Hecla Mining Company, Coeur d'Alene, ID, announced that it is reducing its 2003 silver total cash cost estimate to less than \$2.00 per ounce, a record low for the 112-year-old company. In the second quarter, Hecla produced 74,800 kg of silver at an average total cash cost of \$1.58 per ounce. For the first 6 months of 2003, Hecla produced 149,500 kg of silver at an average total cash cost of \$1.62 per ounce. Hecla estimates that it will mine approximately 280,000 kg of silver in 2003 at less than \$2.00 per ounce. Lower cash costs are due in part to significant by-product credits from increased gold production and a higher average gold price. The company's gold production in the second quarter of 2003 totaled 1,610 kg and 3,280 kg for the first 6 months of 2003 at an average total cash cost of \$138 per ounce.

The Greens Creek silver mine in Alaska, in which Hecla holds a 29.73% interest, produced 87,200 kg of silver in the second quarter of 2003 and 5,380 kg of silver in the first 6 months of 2003. Average cash cost was \$1.31 per ounce. The Lucky Friday silver mine in northern Idaho produced 4,000 kg of silver during the first 6 months of 2003, with 2,000 kg

produced during the second quarter. The average cash cost at Lucky Friday was \$4.68 per ounce in the second quarter and \$4.57 per ounce of silver for the first half of the year (Hecla Mining Company, 2003).

Output of secondary silver in China increased significantly from January through May of 2003, surpassing primary production for the first time. Zhejiang Xianju County Xianfeng Precious Metals Co. Ltd. and Hunan Chenzhou Jin'gui Nonferrous Metals Co. Ltd. are the major secondary silver producers and rank among the top-10 silver producers in China. In May, Xianfeng Precious Metals produced 17 metric tons (t) of silver while output for January through May 2003 increased by 110% to over 100 t. During the same period, Chenzhou Jin'gui increased its output by 300% to 70 t. China's total output for the January-to-May period totaled 1,180 t, up by 16% over the same period in 2002 (Antaika Precious & Minor Metals Monthly).

### **Platinum-Group Metals**

On July 7, the Defense National Stockpile Center (DNSC) announced the aggregated June 2003 PGM sales results under Basic Ordering Agreement, DLA-PGM-002. During June, DNSC sold 17.91 kg of iridium and 638.51 kg of palladium for an overall value of approximately \$3.8 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 price of palladium was above \$1,000 per ounce at the beginning of 2001. The price had fallen to below \$200 per ounce in March of this year and seemed destined to continue trading at lower values, owing to a continuing market surplus. The price of silver firmed in July based on speculation that, given its substantial price discount to platinum, automobile manufacturers would switch back to using palladium rather than platinum in more of its autocatalysts. Crucial to any substantial price recovery, however, will be fresh consumer buying. General Motors has already announced that it will switch back to palladium in more of its cars, and other automobile manufacturers may follow. The price of palladium has averaged about \$200 per ounce in 2003, down from the full year average of \$340 in 2002 (CRU Monitor, 2003).

Silver (Ag) has valuable antibacterial and purifying properties, and for centuries was used to keep potable liquids pure. It has also been used in many medical applications, ranging from wound dressings to attacking the bacteria that causes Legionnaires' disease. Silver's bacterial activity depends on the balance between the activity of  $\text{Ag}^+$  ions, which kill bacteria, and the total amount of Ag released from a coating. If the amount of Ag released is too high, cytotoxicity (toxic to cells) will result. The released  $\text{Ag}^+$  ions act by displacing other essential metal ions such as those of calcium or zinc, from biological material. In order to enhance the antibacterial performance of Ag, it is necessary to increase the concentration of  $\text{Ag}^+$  ions relative to that of metallic Ag released from a coating. Researchers in France and Ireland have determined that platinum (Pt) can enhance the release of  $\text{Ag}^+$  ions from Ag coatings. As Ag is more active than Pt in the electrochemical series, Pt enhances  $\text{Ag}^+$  ion formation through galvanic action. The researchers determined that adding 1% Pt in an Ag matrix significantly enhanced the antibacterial effectiveness of Ag coatings. Cytotoxicity was not observed (Platinum Metals Review, 2003).

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

(Kilograms)

Gold	Alaska	California	Nevada	Other States <sup>2</sup>	Total
2002:					
July	W	770	19,500	3,880	24,200
August	W	742	19,600	3,420	23,700
September	W	709	20,800	4,160	25,600
October	W	569	21,400	4,350	26,300
November	W	519	19,400	4,090	24,000
December	W	534	22,800	4,350	27,700
January-December <sup>p</sup>	W	9,180	240,000	48,500	298,000
2003:					
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	425 <sup>r</sup>	15,800	3,850 <sup>r</sup>	20,100 <sup>r</sup>
May	W	396 <sup>r</sup>	17,400	3,650 <sup>r</sup>	21,500 <sup>r</sup>
June	W	381 <sup>r</sup>	20,900	4,120	25,500
July	W	308	20,700	3,930	24,900
January-July	W	2,940	128,000	26,300	157,000
Silver	Arizona	Idaho	Nevada	Other States <sup>3</sup>	Total
2002:					
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
2003:					
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	71,500 <sup>r</sup>	93,000 <sup>r</sup>
May	W	W	27,700	78,400 <sup>r</sup>	106,000 <sup>r</sup>
June	W	W	26,600	79,000 <sup>r</sup>	106,000 <sup>r</sup>
July	W	W	28,900	70,300	99,300
January-July	W	W	175,000	539,000	714,000

<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:				
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
July:				
Low/date	343.73/17	4.61/1	669.00/9	166.00/22 and 23
High/date	366.87/28	5.19/28 and 31	698.00/28 and 29	190.00/2
Average	352.25	4.87	684.68	175.27
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	5.19 July 28 and 31	709.00 March 10	273.00 January 23
Average	350.92	4.69	660.30	204.45
<u>Handy and Harman:</u>				
2002, Average	310.13	4.62	XX	XX
2003:				
May	355.03	4.75	XX	XX
June	356.35	4.56	XX	XX
July	351.01	4.86	XX	XX
Average year to date	349.67	4.68	XX	XX
<u>London Final:<sup>1</sup></u>				
2002, Average	309.97	4.60	XX	XX
2003:				
May	355.68	4.74	XX	XX
June	356.35	4.53	XX	XX
July	351.02	4.80	XX	XX
Average year to date	349.66	4.65	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)
Imports for consumption:								
2002	2,720	42,200	172,000	--	217,000	11,900	10,700	18,100
2003:								
April	1	7,290	11,800	--	19,100	801	600	1,670
May	82	8,290	11,400	--	19,800	1,040	519	3,710
June:								
Aruba	--	--	130	--	130	--	--	--
Brazil	--	--	1,450	--	1,450	--	--	--
Canada	93	--	11,300	--	11,400	185	4	--
Chile	--	--	525	--	525	--	--	--
Colombia	--	3,100	546	--	3,650	34	2	--
Dominican Republic	--	--	9	--	9	544	6	--
Germany	--	--	--	--	--	13	1	1,600 <sup>5</sup>
Honduras	--	265	--	--	265	4	341	--
Mexico	--	188	8	--	196	37	--	--
Nicaragua	--	179	--	--	179	--	--	--
Peru	--	1,650	--	--	1,650	--	--	--
Venezuela	--	--	149	--	149	--	--	--
Other	--	33	155	--	188	129	4	8 <sup>5</sup>
Total	93	5,410	14,200	--	19,700	947	357	1,610
Year to date	325	40,500	70,400	--	111,000	5,860	2,680	22,500
Exports:								
2002	556	71,700	185,000	--	257,000	85,800	10,900	417,000
2003:								
April	20	7,400	18,600	--	26,000	6,790	112	25,100
May	85	10,000	24,600	--	34,700	11,600	136	43,300
June:								
Armenia	--	--	--	--	--	--	24	--
Brazil	--	--	200	--	200	--	--	--
Canada	--	--	23	--	23	3,540	--	28,400 <sup>5</sup>
China	--	--	11	--	11	--	4	--
Czech Republic	1	--	--	--	1	--	--	--
Dominican Republic	48	--	--	--	48	--	--	1,330 <sup>5</sup>
Germany	--	--	--	--	--	972	--	--
Israel	--	--	--	--	--	--	2	11,000 <sup>5</sup>
Mexico	--	--	1,140	--	1,140	--	1	45 <sup>5</sup>
Switzerland	3	13,400	25,300	--	38,700	--	--	--
Taiwan	--	--	--	--	--	--	1	--
United Kingdom	--	--	11,400	--	11,400	7,920	18	4,520 <sup>5</sup>
Other	--	--	232	--	232	164	--	70 <sup>5</sup>
Total	52	13,400	38,200	--	51,700	12,600	51	45,300
Year to date	393	51,500	126,000	--	178,000	78,600	504	243,000

-- 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>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:										
April	319,000	20,100	--	9,860	349,000	73,800	1,760	224	30,300	206,000
May	251,000	19,000	722	10,000	281,000	19,500	1,570	362	28,400	63,700
June:										
Brazil	--	--	--	--	--	--	--	--	15,500	--
Canada	171,000	--	--	2,230	173,000	908 <sup>4</sup>	--	--	1,040 <sup>4</sup>	6,160
Chile	3,500	--	--	--	3,500	--	--	--	--	--
Colombia	--	636	--	--	636	--	--	--	--	--
Costa Rica	50	--	--	--	50	--	--	--	--	3,050
Dominican Republic	--	--	--	1	1	--	--	--	--	156
France	--	--	--	--	--	28 <sup>4</sup>	420	--	454 <sup>4</sup>	--
Germany	--	--	--	--	--	--	390	--	822 <sup>4</sup>	373
India	--	--	--	--	--	--	--	--	1,260 <sup>4</sup>	--
Israel	--	--	--	--	--	--	(5) <sup>4</sup>	--	--	--
Italy	--	--	--	--	--	--	--	--	941 <sup>4</sup>	8
Japan	--	--	--	--	--	--	280	--	444 <sup>4</sup>	2
Jordan	--	--	--	--	--	--	--	--	--	200
Korea, Republic of	--	--	--	--	--	--	--	--	1,710	--
Mexico	118,000	20,300	--	589	138,000 <sup>4</sup>	30,800	--	--	326	6,330
New Zealand	--	--	--	--	--	--	--	--	--	88
Peru	33,100	--	--	--	33,100	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	--	4,620
Poland	--	--	--	--	--	--	--	--	2,760 <sup>4</sup>	--
Portugal	--	--	--	--	--	--	--	--	--	175
Singapore	--	--	--	2	2	--	--	--	--	370
Switzerland	--	--	--	--	--	--	50	--	--	--
Taiwan	--	--	--	--	--	--	--	--	71	--
United Kingdom	12	--	--	--	12	--	155	--	398	18,900
Other	25 <sup>4</sup>	--	--	--	25	--	--	--	44 <sup>4</sup>	17
Total	325,000	20,900	--	2,820	349,000	31,700	1,300	--	25,700	40,400
Year to date	1,810,000	104,000	1,070	37,100	1,960,000	186,000	8,130	600	166,000	475,000

-- 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:									
April	19,700	1,590	17,300	38,600	3,530	38,400	7,590	56,800	179,000
May	7,420	1,190	246	8,860	906	31,500	4,970	26,900	212,000
June:									
Austria	--	--	--	--	--	--	--	--	1,490
Belgium	--	--	--	--	--	176	--	424	20,600
Canada	1,080 <sup>4</sup>	--	--	1,080	674	891 <sup>4</sup>	2,880 <sup>4</sup>	3,770	74,600
China	--	--	--	--	--	--	--	--	16,700
France	--	--	--	--	--	1,560	--	554	--
Germany	--	--	--	--	19	5,860	--	492	16,900
Guatemala	811	--	--	811	--	--	--	--	--
Hong Kong	--	--	--	--	40 <sup>4</sup>	2,200	316	975	291
Israel	--	--	--	--	--	--	--	279	--
Italy	--	--	--	--	17 <sup>4</sup>	16,700	--	166	23,100
Japan	--	--	--	--	1 <sup>4</sup>	3,110	--	4,000	26,900
Jordan	--	--	--	--	--	--	--	156	--
Korea, Republic of	432	--	--	432	368 <sup>4</sup>	564	147	3,100	86
Mexico	--	--	--	--	--	1,860	139	895 <sup>4</sup>	--
Netherlands	--	--	--	--	--	115	--	368	--
Philippines	--	--	--	--	--	--	70	--	--
Saudi Arabia	--	--	--	--	--	--	--	--	8,290
Singapore	--	--	--	--	--	368	--	958 <sup>4</sup>	--
Spain	--	--	--	--	--	--	--	1,100	--
Sweden	--	--	--	--	--	918	--	99	30,200
Switzerland	--	1,520	--	1,520	--	33	--	--	--
Taiwan	--	--	--	--	--	3,610 <sup>4</sup>	92	373	--
United Arab Emirates	--	--	--	--	--	--	--	--	103
United Kingdom	19,000	--	--	19,000	--	6,080	--	2,260 <sup>4</sup>	3,520
Uruguay	--	--	--	--	--	--	--	1,760	--
Other	22	--	--	22	37	57	26	270	62
Total	21,400	1,520	--	22,900	1,160	44,100	3,670	22,000	223,000
Year to date	114,000	10,400	57,500	182,000	10,700	212,000	34,300	192,000	1,160,000

-- 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:												
April	61	6,430	731	424	3,190	6	5,720	2,660	235	4	2,960	1,520
May	33	6,020	1,150	514	5,440	--	7,220	2,310	186	--	658	1,710
June:												
Argentina	--	--	--	--	4	--	--	--	--	--	--	--
Belgium	--	326	--	--	2,030	--	264	--	--	--	--	82
Canada	1	--	--	45	16	--	210	2	--	--	--	--
Chile	--	--	--	--	82	--	--	--	--	--	--	--
China	--	--	2	3	1,730	--	20	--	--	3	--	--
Colombia	--	--	39	--	1	--	--	--	--	--	--	--
Ecuador	--	--	--	(4)	--	--	--	--	--	--	--	--
France	--	--	--	14	--	--	--	2 <sup>5</sup>	--	--	--	--
Germany	--	487	29	250	6,390	--	67	174	--	--	4	8 <sup>5</sup>
Hong Kong	--	--	2	--	--	--	--	--	--	--	--	--
India	--	5	--	--	--	--	--	--	--	--	--	--
Israel	--	--	61	--	--	--	--	--	--	--	--	--
Italy	--	8	--	6	--	--	3	20 <sup>5</sup>	--	--	--	--
Japan	--	33	155	--	4,650	--	240 <sup>5</sup>	124	--	--	--	22
Korea, Republic of	--	--	--	3	1,360	--	--	--	--	--	--	--
Lebanon	--	--	--	--	1,470	--	--	--	--	--	--	--
Netherlands	--	--	--	--	--	--	--	72 <sup>5</sup>	--	--	--	--
Norway	--	--	--	--	--	--	358	--	--	--	--	10
Philippines	--	--	--	1	1	--	--	--	--	--	--	--
Russia	--	541	--	--	--	--	896	706	--	--	52	285
South Africa	--	4,100	197	23	--	--	3,100	6	57	--	776	407
Spain	--	--	--	--	--	--	4	--	--	--	--	--
Switzerland	--	63	--	7	--	--	--	645	--	--	--	--
United Kingdom	(4)	598	3	5	8,350	(4)	250	338	33	--	--	13
Total	1	6,160	486	357	26,100	(4)	5,410	2,090	89	3	831	826
Year to date	488	36,600	4,000	2,820	44,700	6	30,900	12,800	1,010	13	7,760	5,790

-- 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>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 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:					
April	2,080	1,680	1,600	72	21
May	1,620	1,550	2,310	25	17
June:					
Australia	24 <sup>4</sup>	--	--	--	--
Austria	--	1	--	--	1 <sup>4</sup>
Belgium	36	6	--	--	--
Canada	140	149	230	(5)	--
China	29 <sup>4</sup>	--	--	--	--
Colombia	4 <sup>4</sup>	--	--	--	--
Cyprus	--	(5)	--	--	--
Denmark	4 <sup>4</sup>	(5)	--	--	--
Finland	1	--	--	--	--
France	36 <sup>4</sup>	4	--	--	(5) <sup>4</sup>
Germany	633 <sup>4</sup>	259	8	--	(5) <sup>4</sup>
Hong Kong	21 <sup>4</sup>	7	--	--	--
India	2 <sup>4</sup>	--	--	--	--
Ireland	--	51	--	--	(5) <sup>4</sup>
Israel	7	--	--	--	--
Italy	2	8 <sup>4</sup>	--	--	--
Japan	82 <sup>4</sup>	1,020	151	4	--
Korea, Republic of	2 <sup>4</sup>	42	--	--	--
Liechtenstein	1	1	--	--	--
Macao	1	(5)	--	--	--
Malaysia	3 <sup>4</sup>	1	--	--	--
Mexico	1 <sup>4</sup>	7	--	(5) <sup>4</sup>	(5) <sup>4</sup>
Netherlands	108	3	--	--	--
Netherlands Antilles	--	1	--	--	--
New Zealand	8 <sup>4</sup>	--	--	--	--
Norway	10	--	--	--	--
Philippines	1	2	--	--	--
Romania	--	(5)	--	--	--
Singapore	3	7	--	--	(5) <sup>4</sup>
Slovenia	2	--	--	--	--
South Africa	--	13	--	--	--
Spain	8	1	--	--	--
Suriname	--	1	--	--	--
Sweden	1	(5)	--	--	--
Switzerland	13 <sup>4</sup>	45 <sup>4</sup>	541	--	--
Taiwan	301 <sup>4</sup>	3	--	--	--
Thailand	--	2	--	--	--
Turkey	--	1	--	--	--
United Kingdom	369 <sup>4</sup>	682	1,680	96	1 <sup>4</sup>
Total	1,850	2,320	2,610	101	2
Year to date	10,700	10,300	12,800	459	147

-- 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>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.