

Mineral Industry Surveys

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PRECIOUS METALS IN AUGUST 2001

U.S. mines produced 26,800 kilograms (kg) of gold and 132,000 kg of silver in August 2001. Compared with July 2001, production of gold was down 24% in California and down 8% in Nevada, and production of silver increased 13% in Nevada.

Gold

Domestic.—The Office of the U.S. Trade Representative announced that gold necklaces and jewelry made from other precious metals were among 42 products added to an expanded duty-free list of goods imported from India. Import tariffs on gold and precious metals jewelry had ranged from 5.2% to 5.8%. The United States is India's largest trading partner, with more than \$17 billion in trade between the two countries last year (American Metal Market, 2001b).

International.—South African gold producers Harmony Gold Mining Company Limited, Goldfields Limited, and Durban Roodeport Deep Limited avoided a strike planned by the National Union of Mineworkers (NUM). All three gold mining companies met terms set by NUM for increased annual leave and a raise in base pay. The agreements will remain in effect for 2 years (American Metal Market, 2001c).

Goldfields Ltd. and Delta Gold Ltd. held meetings to discuss a merger by the two companies that would create the second-largest Australian gold producer. No agreement was reached by the companies, and the possibility of their merger remains uncertain. Both companies hold gold assets around the Kalgoorlie region of Western Australia, centered at the Golden Feather Project in Goldfield's Paddington plant (Platts Metals Week, 2001a).

The Russian Government is expected to rescind its duty on gold and silver exports. The duty has been in effect since May

1999. Exports of Russian gold and silver have been assessed duties of 5% and 6.5%, respectively. The exports are not subject to duties, however, if they go to countries within the Russian Customs Union, which include Belarus, Kazakhstan, Ukraine, and Uzbekistan (Platts Metals Week, 2001d).

Gold jewelry is one of 106 commodities that now are allowed to be priced freely in China. Before price deregulation, the People's Bank of China set standard gold prices, and gold stores could only vary the prices slightly. The Government's relaxed attitude toward price controls for gold jewelry is expected to increase consumption and encourage design quality (Platts Metals Week, 2001b).

GoldAvenue acquired Vivre Inc. to complement its internet retailing operation. Vivre is a multimedia marketing company that publishes luxury catalogs with a circulation of 3 million. GoldAvenue.com was launched in early 2000 to provide easy access to gold information (American Metal Market, 2001a).

The World Gold Council reported that gold demand during the second quarter of 2001 was 764,000 kg, 3% below the second quarter of 2000. However, for the first 6 months of 2001, gold demand was 1,601,000 kg, 1% higher than in 2000. There was some growth during the second quarter. For example, gold demand rose 13% in Egypt, 9% in Saudi Arabia, 8% in the Arabian Gulf, and 4% in the United States. Local economic problems, however, brought a sharp fall in demand in several other countries. For example, gold demand dropped 47% in Taiwan and 18% in Japan. In the second quarter, consumption of gold for jewelry was 684,000 kg, 2% below the second quarter of 2000; investment demand was 80,000 kg, 14% below the second quarter of 2000 (World Gold Council, 2001).

Update.—Up to \$650 million of gold and silver was buried

in basement vaults under rubble from destruction of the World Trade Center following the terrorist attacks on September 11. COMEX, a division of the New York Mercantile Exchange, owns the vaults. Gold bars worth about \$106 million are in the vaults (Platts Metals Week, 2001c).

The U.S. Mint reported a dramatic increase in gold coin sales following the September 11 attacks. American Gold Eagle coin sales soared to 49,500 troy ounces (oz) by September 25th. The monthly high for the year had been 22,500 oz in July, and August sales were only 6,500 oz (American Metal Market, 2001d).

Silver

After maintaining a price range \$4.20-\$4.30 per oz for most of July, silver prices began to fall in the first week of August. The London fix on August 7 was \$4.14-per-oz, down \$0.12 from levels in July and down \$0.78 from levels in the first week of August 2000. The \$4.14 per oz fix was the lowest in 8 years. Silver prices were influenced by a number of factors. On the demand side, the annual northern hemisphere slowdown has exacerbated the impact of the current global economic weakness. On the supply side, the Chinese Government reacted to local industry complaints about high domestic industry inventories and low domestic consumption by more than doubling the country's export quota. The original export quota for 2001 was 420 t, up from 280 t in 2000. The new 2001 quota was revised upwards to 920 t.

Subsequent to the August 7 low, the price of silver was boosted by gold's market strength and has rebounded to the \$4.20 per oz level (CRU Precious Metals Monitor, 2001).

An expansion project at Precious Metals Smelter of Yuguang Gold & Lead Co. Ltd. made the company the largest silver producer in China with a capacity of 300 metric tons per year (t/yr). Yuguang began construction of the expansion project in March 2001. Construction included two refineries and a furnace with the capacity to process 10 t of anode sludge. After 3 months of construction, the plant was successfully put through a trial operation in July 2001. The plant was put into full commercial operation in September 2001. In the first 6 months of 2001, the company increased silver output by 14% to 75 t. In 2001, the company acquired the right to export silver and was allotted a quota of 125 t by the Ministry of Foreign Trade and Economic Cooperation (Antaike, 2001).

Platinum-Group Metals

Exports of platinum-group metals (PGM) by RAO Norilsk

Nickel will not be affected by a Russian Government decision to suspend exports of precious metal products. The suspension by the Russian Finance Ministry will delay shipments of prefabricated products only and will not affect exports of unwrought PGM. Norilsk's exports of palladium will continue under the existing 10-year quota. Russia supplies about 60% of the world's demand for palladium (Metal Bulletin, 2001).

Anglo American Platinum Corp. Ltd. and African Rainbow Minerals (ARM) have agreed to form a 50:50 joint venture to develop the Maandagshoek project, a new PGM mine on the eastern limb of the Bushveld Igneous Complex in South Africa. Anglo American and ARM will each fund half of the R1.35 billion capital cost of the project, which is designed to produce 200,000 tons per month of ore yielding 5,000 kg per year of platinum plus additional amounts of byproducts. The decision to develop Maandagshoek was made in 1999, and the new project is part of Anglo's overall expansion plan to increase its annual platinum output from 62,200 kg to 108,000 kg by 2006 (Mining Journal, 2001).

References Cited

- American Metal Market, 2001a, GoldAvenue links up with Vivre, U.S. direct luxury marketing firm: American Metal Market, v. 109, no.161, August 20, p. 5.
- 2001b, Metals on wider duty-free list for India: American Metal Market, v. 109, no.156, August 13, p. 11.
- 2001c, S. Africa mine walkouts averted: American Metal Market, v. 109, no.150, August 3, p. 5.
- 2001d, U.S. Mint gold coins sales soar following attacks by terrorists: American Metal Market, v. 109, no.187, September 26, p. 12.
- Antaike, 2001, Silver & gold project brings Yuguang to be the largest silver producer in China: Antaike, no. 20, August, p. 2.
- CRU Precious Metals Monitor, 2001, Silver—Losing it: CRU Precious Metals Monitor, August, p. 5.
- Metal Bulletin, 2001, Norilsk is unaffected by export delays: Metal Bulletin, no. 8603, August 30, p. 3.
- Mining Journal, 2001, Anglo Platinum signs empowerment deal: Mining Journal, v. 337, no. 8648, August 24, p. 139.
- Platts Metals Week, 2001a, Australia's Delta, goldfields in preliminary merger talks: Platts Metals Week, v. 72, no. 33, August 13, p. 4.
- 2001b, China deregulates gold jewelry pricing: Platts Metals Week, v. 72, no. 32, August 6, p. 15.
- 2001c, Gold again favored by some: Platts Metals Week, v. 72, no. 38, September 17, p. 5.
- 2001d, Russia expected to drop export duties on gold, silver: Platts Metals Week, v. 72, no. 33, August 13, p. 4.
- World Gold Council, 2001, Gold demand steady in first half-year: London, World Gold Council, no. 36, August, p. 1.

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

(Kilograms)

Gold	Alaska	California	Nevada	Other States 2/	Total
2000:					
August	1,510 r/	1,340 r/	22,300 r/	4,970 r/	30,100
September	1,510	1,460	21,900 r/	3,780 r/	28,600
October	1,510	1,390 r/	19,000 r/	4,370 r/	26,300
November	1,510 r/	1,180 r/	23,600 r/	3,780 r/	30,100
December	1,440	1,190 r/	25,000 r/	4,520 r/	32,200
January-December p/	16,400 r/	16,800 r/	260,000 r/	51,900 r/	345,000
2001:					
January	1,390	1,370	21,800	4,500	29,000
February	1,280	1,090 r/	19,700	4,320	26,400 r/
March	1,390	1,320	20,500	3,450 r/	26,600 r/
April	1,240	1,180	20,300	4,280	27,000
May	1,290	857 r/	20,700	4,620 r/	27,500 r/
June	1,240	1,270 r/	22,200	4,720 r/	29,400 r/
July	W	1,070 r/	22,700 r/	5,840 r/	29,600 r/
August	1,370	819	20,800	3,790	26,800
January-August r/	10,600	8,970	169,000	34,300	222,000
Silver	Arizona	Idaho	Nevada	Other States 3/	Total
2000:					
August	W	34,800	53,200	73,200 r/	161,000 r/
September	W	34,500	60,900	69,700	165,000
October	W	34,500	45,900	58,000 r/	138,000 r/
November	W	34,500	57,800 r/	66,400 r/	159,000 r/
December	W	34,500	61,200	73,000 r/	169,000
January-December p/	W	416,000	747,000 r/	848,000 r/	2,020,000 r/
2001:					
January	W	20,300	40,900	76,100	137,000
February	W	20,300	42,400	66,300 r/	129,000 r/
March	W	W	46,000	83,500	129,000 r/
April	W	W	37,000	106,000	143,000 r/
May	W	W	50,900	84,700 r/	136,000 r/
June	W	W	60,400 r/	92,400 r/	153,000 r/
July	W	W	43,700 r/	87,600 r/	131,000 r/
August	W	W	49,300	82,700	132,000
January-August	W	40,600	321,000	596,000	958,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data, included with "Other States."

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

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

3/ 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>				
<u>2000:</u>				
Low/date	264.90 (October 27)	4.59 (December 19)	416.00 (January 6)	437.00 (January 6)
High/date	313.88 (February 7)	5.53 (February 7)	625.00 (December 13 and 28)	985.00 (December 27)
Average	280.10	5.00	549.31	691.84
<u>2001:</u>				
<u>June:</u>				
Low/date	266.50/1	4.32/27	563.00/29	600.00/28
High/date	275.92/27	4.45/1 and 14	598.00/1	647.00/4
Average	271.34	4.37	582.71	619.67
<u>July:</u>				
Low/date	266.20/6	4.22/19	479.00/31	445.00/30
High/date	276.41/19	4.32/2	564.00/13	602.00/2
Average	268.87	4.26	532.76	526.38
<u>August:</u>				
Low/date	267.50/8	4.16/8 and 13	435.00/15	443.00/7
High/date	278.57/17	4.29/17	486.00/3	486.00/3
Average	273.50	4.21	456.22	458.52
<u>Year to date:</u>				
Low/date	257.04 (April 2)	4.16 (August 8 and 13)	435.00 (August 15)	443.00 (August 7)
High/date	292.40 (May 21)	4.87 (January 30)	645.00 (January 10 and 15)	1,100.00 (January 26)
Average	267.79	4.42	575.28	725.27
<u>Handy and Harman:</u>				
2000	278.96	5.00	XX	XX
<u>2001:</u>				
June	270.23	4.37	XX	XX
July	267.53	4.25	XX	XX
August	272.40	4.21	XX	XX
Average year to date	266.67	4.42	XX	XX
<u>London Final: 1/</u>				
2000	279.04	4.95	XX	XX
<u>2001:</u>				
June	270.23	4.36	XX	XX
July	267.53	4.25	XX	XX
August	272.39	4.20	XX	XX
Average year to date	266.67	4.40	XX	XX

XX Not applicable.

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

Source: Platts Metals Week.

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

(Kilograms of gold content, unless otherwise specified)

Period and country	Ores and concentrates 2/	Doré and precipitates	Refined bullion 3/	Ash and residues	Total 4/	Waste and scrap (gross weight)	Metal powder (gross weight)	Gold compounds (gross weight)
Imports for consumption:								
2000	65	39,000	184,000	60	223,000	29,800	6,720	7,970
2001:								
May	9	1,950	9,300	1	11,300	984	618	385
June	4	2,030	12,400	12	14,500	1,350	791	121
July:								
Aruba	--	--	102	--	102	--	--	--
Brazil	--	--	2,020	--	2,020	(5/)	--	37 6/
Canada	--	--	9,540	13	9,550	1,150	962	--
Chile	--	148	450	--	598	--	--	--
Colombia	--	--	261	--	261	--	--	--
Costa Rica	--	--	--	--	--	179	--	--
Dominican Republic	--	--	--	--	--	501	--	--
Honduras	--	850	--	--	850	50	--	--
Mexico	--	297	38	--	335	404	--	--
Nicaragua	--	132	--	(5/) 6/	133	--	--	--
Peru	--	784	--	--	784	--	--	--
Singapore	--	--	260	--	260	2	--	--
Other	1	70	312	--	383	223	1	50 6/
Total	1	2,280	13,000	13	15,300	2,500	963	87
Year to date	20	12,000	95,000	123	107,000	11,800	5,280	1,360
Exports:								
2000	745	106,000	440,000	--	547,000	64,100	1,130	1,390,000
2001:								
May	8	12,900	62,700	--	75,600	3,690	117	14,100
June	61	8,350	52,400	--	60,800	3,850	725	8,160
July:								
Armenia	--	--	12	--	12	--	40	--
Belgium	--	--	--	--	--	140	--	--
Bermuda	--	--	--	--	--	--	1	--
Canada	--	487	31	--	518	549	(5/)	25,700 6/
Dominican Republic	2	--	--	--	2	--	--	687 6/
Germany	--	--	--	--	--	53	1	--
Guatemala	--	--	181	--	181	9	--	--
Israel	--	--	--	--	--	--	5	9,120 6/
Korea, Republic of	3	--	--	--	3	--	--	--
Mexico	--	--	828	--	828	--	1,830	1 6/
Peru	--	--	351	--	351	--	--	--
Switzerland	--	1,120	3,500	--	4,620	--	1	--
Trinidad and Tobago	2	--	--	--	2	--	--	--
United Kingdom	--	5,760	7,990	--	13,800	1,700	11	1
Other	--	3	23	--	26	109	--	58 6/
Total	7	7,380	12,900	--	20,300	2,560	1,890	35,500
Year to date	183	54,100	346,000	--	401,000	27,400	3,490	446,000

-- Zero.

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

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

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

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

5/ Less than 1/2 unit.

6/ 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 1/

(Kilograms of silver content, unless otherwise specified)

Period and country	Bullion	Doré	Ores and concentrates 2/	Ash and residues	Total	Other unwrought silver (gross weight)	Metal powder (gross weight)	Silver nitrate (gross weight)	Semimanufactured form 3/ 4/ (gross weight)	Waste and scrap (gross weight)
2000	3,810,000	73,900	1,420	55,800	3,940,000	204,000	235,000	24,200	140,000	1,130,000
2001:										
May	214,000	13,400	2,610	3,080	233,000	9,430	204	--	12,900	61,000
June	178,000	27,200	--	3,150	208,000	37,600	480	60	16,300	150,000
July:										
Australia	--	--	--	113	113	--	--	--	--	86
Belgium	831	--	--	--	831	--	--	--	--	33
Brazil	--	--	--	--	--	--	--	--	9,800	2
Canada	134,000 5/	--	2,330 5/	1,020	137,000	19,800 5/	(6/) 5/	--	9,670 5/	8,920
Chile	11,900	13,300	--	--	25,200	--	--	--	--	--
Colombia	368	1,370	--	--	1,740	--	--	--	--	--
Dominican Republic	--	--	--	--	--	--	--	--	--	181
Germany	84	--	--	--	84	--	228 5/	--	363	25,900
Japan	--	--	--	--	--	--	113	--	116 5/	7
Korea, Republic of	--	--	--	--	--	--	40	--	1,390 5/	73
Kuwait	--	--	--	--	--	--	--	--	--	162,000
Malaysia	--	--	--	--	--	--	--	--	--	132
Mexico	104,000	14,500	--	848	120,000	5,980	--	--	146	3,460
Peru	12,700	--	--	--	12,700	--	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	249
Switzerland	--	--	--	--	--	--	107 5/	--	20 5/	--
United Kingdom	--	--	--	728	728	--	--	20	95 5/	465
Other	--	28 5/	--	--	28	--	--	--	210 5/	171
Total	264,000	29,300	2,330	2,710	298,000	25,800	488	20	21,800	201,000
Year to date	1,630,000	83,700	4,940	21,700	1,740,000	163,000	19,700	25,500	102,000	579,000

-- Zero.

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

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

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

4/ Semimanufactured (including silver plated with gold or platinum) forms of silver.

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

6/ Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF SILVER 1/

(Kilograms of silver content, unless otherwise specified)

Period and country	Bullion	Doré	Ores and concentrates 2/	Total	Other unwrought silver (gross weight)	Metal powder (gross weight)	Silver nitrate (gross weight)	Semimanufactured form 3/ (gross weight)	Waste and scrap (gross weight)
2000	279,000	36,000	65,100	380,000	57,500	424,000	217,000	148,000	1,670,000
2001:									
May	38,700	1,510	24,700	64,900	5,880	13,000	20,300	15,100	191,000
June	44,300	740	33,700	78,700	2,190	8,080	8,900	11,400	111,000
July:									
Belgium	--	--	--	--	--	--	--	95	13,900
Brazil	--	--	--	--	--	--	--	--	2,390
Canada	909	--	--	909	9,610 4/	1,160	15,000	6,530	47,500
China	--	16	--	16	--	543	--	262	12,100
Colombia	--	--	--	--	--	--	--	258	--
Costa Rica	--	--	--	--	--	--	--	--	117
Dominican Republic	--	--	--	--	150	--	--	--	--
Egypt	--	--	--	--	--	--	--	577	--
France	--	--	--	--	--	884	--	533 4/	--
Germany	--	--	--	--	--	4,840	28	280	29,400
Hong Kong	--	--	--	--	--	--	--	156	19
Israel	--	--	--	--	--	--	204	--	--
Italy	--	--	--	--	--	17	--	48	3,330
Japan	--	--	--	--	27 4/	161	--	4,150	19,600
Korea, Republic of	--	--	--	--	29	4,220 4/	--	40	--
Mexico	--	--	25,400	25,400	--	421	300	2,890	88
Netherlands	--	--	--	--	12	49	--	260	400
Peru	--	--	--	--	--	--	--	160	--
Saudi Arabia	--	--	--	--	--	--	--	--	7,680
Singapore	--	--	--	--	--	124	--	38	--
Spain	--	--	--	--	--	--	--	1,110	--
Sweden	--	--	--	--	--	240	--	--	--
Switzerland	--	427	--	427	--	--	--	2,970 4/	--
Taiwan	--	--	--	--	1,940	335 4/	--	575	--
United Kingdom	19,200	1,050	--	20,200	492	70	18	105 4/	10,700
Other	72	--	--	72	--	103	30	179 4/	18
Total	20,100	1,490	25,400	47,000	12,300	13,200	15,600	21,200	147,000
Year to date	247,000	8,380		256,000	31,700	132,000	114,000	107,000	963,000

-- Zero.

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

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

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

4/ 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 1/

(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 2/	Unwrought osmium	Unwrought ruthenium	Rhodium 3/
2000	2,550	68,000	3,870	7,480	12,100	27	154,000	27,900	2,700	133	20,800	18,200
2001:												
May	247	5,230	514	315	143	(4/)	4,700	4,130	222	9	446	2,190
June	265	5,770	941	766	191	(4/)	14,800	685	194	--	694	1,640
July:												
Austria	--	--	--	(4/)	--	2	--	--	--	--	--	--
Belgium	--	711	--	--	--	--	4,770 5/	--	--	--	--	137 5/
Brazil	--	--	--	--	98	--	--	--	--	--	--	--
Canada	2	--	--	15	33	--	356	--	--	--	--	--
Chile	--	--	--	--	--	--	--	--	--	--	--	--
China	--	--	--	--	--	--	230 5/	--	--	--	--	--
Colombia	--	--	30	--	--	--	--	--	--	--	--	--
Czech Republic	--	--	3	--	--	--	--	--	--	--	--	--
Finland	--	--	--	--	8	--	--	--	--	--	--	--
France	--	--	--	--	4	--	--	2 5/	--	--	--	--
Germany	30	434	24	154	62	--	61	100	--	--	31	27
India	--	--	--	(4/)	--	--	--	--	--	--	--	--
Ireland	--	--	--	--	--	--	--	--	--	--	--	--
Israel	--	--	59	--	--	--	--	--	--	--	--	--
Italy	--	145	(4/)	--	--	--	116	26	--	--	--	3
Japan	--	14	(4/)	3	--	--	557	30	--	--	--	--
Korea, Republic of	--	--	--	--	(4/)	--	30	--	--	--	--	--
Mexico	--	--	--	--	13	--	--	--	--	--	--	--
Netherlands	--	--	--	--	--	--	--	--	--	--	--	--
Norway	--	16	--	--	--	--	433	--	--	--	--	--
Philippines	--	--	--	--	5	--	--	--	--	--	--	--
Russia	--	--	198	--	--	--	1,780	50	--	--	10	148
Singapore	--	--	--	--	--	--	--	3	--	--	--	--
South Africa	360	3,550	127	--	13	--	1,650	374	48	--	455	266 5/
Sweden	--	--	--	--	--	--	429	--	--	--	--	--
Switzerland	--	--	5	83	--	--	--	--	--	--	--	--
United Kingdom	--	1,070	--	6	17	--	1,880	4	160	--	--	141
Total	393	5,940	446	261	252	2	12,300	589	207	--	496	722
Year to date	2,010	39,700	2,720	2,880	2,240	25	108,000	9,630	2,250	42	3,690	7,290

-- Zero.

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

2/ Unwrought and other forms of iridium.

3/ Unwrought and other forms of rhodium.

4/ Less than 1/2 unit.

5/ 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 1/

(Kilograms of metal content, unless otherwise specified)

Period and country	Palladium 2/	Platinum 2/	Platinum waste and scrap	Iridium, osmium and ruthenium 2/ 3/	Rhodium 2/
2000	57,900	25,000	7,360	1,480	797
2001:					
April	3,520	2,070	1,590	254	79
May	2,010	2,630	607	83	2
June:					
Australia	6	3	--	--	--
Austria	--	1	--	--	--
Belgium	17	1	9	--	--
Canada	335 4/	473	53	--	--
Chile	2 4/	--	--	--	--
China	--	2	--	13	--
Denmark	6	--	--	--	--
Dominican Republic	--	--	--	--	1
France	26 4/	6	--	(5/)	--
Germany	110	132	823	2	(5/)
Greece	2 4/	(5/)	--	--	--
Hong Kong	14	9	--	(5/)	(5/)
Iceland	1	--	--	--	--
India	--	--	--	--	(5/)
Ireland	--	10	--	--	--
Israel	1 4/	--	--	--	--
Italy	391	7	--	--	(5/)
Japan	237 4/	2,030 4/	71	--	--
Korea, Republic of	667	129	45	--	--
Malaysia	--	1	--	--	--
Mexico	2 4/	8	2	--	--
Netherlands	2 4/	2	--	--	--
New Zealand	2 4/	--	--	--	--
Philippines	--	2	--	--	--
Russia	1	7	--	--	--
Saudi Arabia	--	1	--	--	--
Singapore	65 4/	1	--	--	--
Slovenia	2	--	--	--	--
Spain	10	3	--	--	--
Switzerland	2	9	(5/)	--	--
Taiwan	38	1	--	--	--
Thailand	8 4/	3	--	--	--
United Arab Emirates	2	--	--	--	--
United Kingdom	66	448	392	67	6
Total	2,010	3,290	1,400	82	7
Year to date	26,600	20,200	9,410	887	865

-- Zero.

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

2/ Unwrought and other forms.

3/ Gross weight.

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

5/ Less than 1/2 unit.

Source: U.S. Census Bureau.