

# Mineral Industry Surveys

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## PRECIOUS METALS IN JULY 2001

U.S. mines produced 27,000 kilograms (kg) of gold and 120,000 kg of silver in July 2001. Compared with June 2001, production of gold was down 16.5% in California and 9.5% in Nevada, and silver production was down 27% in Nevada. Table 8 in this report lists the top 30 gold-producing mines in the United States for the first 6 months in 2001.

### Gold

**Domestic.**—Placer Dome Inc. secured a short-term power agreement so that its Golden Sunlight gold mine in Montana can continue production until late 2001. The mine is scheduled to close next year because its operation is no longer economically viable (Metal Bulletin, 2001c).

NovaGold Resources Inc. plans to acquire a 70% interest in Alaska's Donlin Creek gold deposit, which is considered to be one of the largest undeveloped gold resources in the world. The resources are estimated at 215,000 kg (6.9 million troy ounces), with another inferred gold resource of 187,000 kg (6 million ounces). Under the agreement with Placer Dome Inc. and Alaska's Calista Corp., NovaGold must spend at least \$10 million within 10 years toward the exploration and development of Donlin Creek to earn a 70% interest in the project and become its manager and operator (American Metal Market, 2001a).

Crown Resources Corp. agreed to acquire Battle Mountain Gold Corp.'s (BMG) stake in the 44,000 kg (1.4 million ounces) of gold at the Crown Jewel deposit in Washington State. BMG, a subsidiary of Newmont Mining Corp., will convert its right to earn a 54% interest in the gold deposit to a net smelter return royalty, and Crown will assume 100% ownership of the deposit and be the project manager (Platts Metals Week, 2001a).

**International.**—Placer Dome Inc. will sell all its shares of Placer Dome Venezuela, which includes its interest in the 230,000-kg (7.4 million ounces) Las Cristinas gold deposit. The buyer, Vanessa Ventures Ltd., plans to construct a 7,500-metric-ton-per-day processing plant. The plant will produce about 3,100 kg (100,000 ounces) of gold annually at an estimated cash cost of \$150 per ounce. Operations will focus on mining higher-grade, near-surface gold ore (Metal Bulletin, 2001b).

Almost a dozen companies are teaming up with CPM Group to form an internet-based precious metals trading exchange called Electronic Precious Metals LLC. A series of principal-to-principal exchanges are being developed with trading platforms in forward markets for gold, silver, platinum, and palladium. The primary instruments to be traded will be spot, forward, and options contracts; no futures contracts will be available. Swaps, leases, and other types of transactions will be added later (American Metal Market, 2001b).

Russian gold output will rise to about 150,000 kg in 2001 from 145,000 kg produced in 2000. By-product production of gold will be the main reason for the expected increase in gold production. Output of gold as a byproduct (mostly at nickel and copper mining operations) is expected to be 14,500 kg in 2001 from 10,500 kg produced in 2000. Gold produced from hard-rock and alluvial deposits and scrap recovery are expected to remain at about the same level as in 2000. Russian gold consumption is about 10,000 to 15,000 kg per year with 80% of that use in the jewelry industry. By contrast, the Central Bank of Russia is reducing its role as the principal buyer of domestic gold. The bank bought 54,700 kg of gold in 1999, 26,700 kg of gold in 2000, and no purchases of gold as of midyear (Platts Metals Week, 2001e).

The Bank of England sold 20,000 kg of gold at \$267.25 per ounce on July 11. The auction, which was 4.1 times oversubscribed, was the second of a third and final series of sales aimed at reducing British gold reserves. Immediately after the sale, the spot price of gold was trading \$0.25 higher, but dropped back shortly thereafter (Platts Metals Week, 2001c).

The National Union of Mineworkers met with the Chamber of Mines in South Africa to discuss an offer by gold producers to avert a national strike. The strike centered on wage issues, medical benefits, and annual leave for over 155,000 miners in gold mines and collieries (American Metal Market, 2001c).

The London Bullion Market Association's gold clearing statistics declined sharply during June. Gold transfers fell 28.5% in comparison with May, falling to 20.5 million ounces (638,000 kg). The number of transfers declined from 940 to 844. In addition, the quantity of gold transferred in June 2001 was 27% lower than that of June 2000 (Platts Metals Week, 2001b).

## Silver

The silver market continued its downward spiral in July, falling to 4-year lows as institutional investors abandoned the metal in the wake of poor industrial demand. The spot July silver contract settled at \$4.208 per ounce on July 5, the lowest since July 16, 1997, when spot silver settled at \$4.235 per ounce.

With silver prices falling below the cost of production, mining operations in the historic Coeur d'Alene Mining District of northern Idaho are starting to close or drastically reduce mining operations. The Lucky Friday silver mine, owned by Hecla Mining Co., may eventually follow the Sunshine silver mine into closure. Lucky Friday averages about 160 metric tons per year of silver and has a workforce of 200 (Platts Metals Week, 2001d).

## Platinum-Group Metals

Demand from the major palladium consuming industries—autocatalysts and electronics—has weakened substantially and caused prices to fall to new lows. Palladium led a drop in prices that began on July 13 when it recorded a fix of \$512 ounce; platinum's afternoon fix was \$515 per ounce. When trading began on July 31, palladium was trading at \$457 per ounce before buying interest started to appear, raising prices on the London morning fix to \$473, still the lowest fix since January 2000. There was little interest in platinum which reached \$473 per ounce on the same fix. Market observers blamed the palladium price drop on substantial liquidations in the Japanese market. In the platinum market, weak demand from Chinese jewelers was blamed for some of the price weakness (Metal Bulletin, 2001d).

Zimbabwe Platinum Mines (Zimplats) reports good progress on its Ngezi platinum-group metals (PGM) project at the southern end of the Hartley Geological Complex. Ngezi is

reportedly on schedule to start production during the first 6 months of 2002 at an initial rate of 6,200 kg of PGM per year. Ore from the open-cast mine will be hauled via a dedicated road to a treatment plant on the old Hartley Platinum project site, now renamed the Selous Metallurgical Complex (SMC). Construction of the 77-kilometer road from Ngezi to SMC began in April and, according to Zimplats, is expected to be completed on schedule by mid-December (African Mining Bulletin, 2001).

Reports out of Russia indicate that RAO Norilsk Nickel may be getting closer to securing a multi-year license to export platinum. According to the head of Russia's state stockpile of precious metals and gemstones, the Russian government is likely to approve a 5-year license by the end of 2001 (Metal Bulletin, 2001a).

A Dutch company has developed a ruthenium-based catalyst for ammonia synthesis that is 10 to 20 times more active than conventional iron-based catalysts and has an equivalent lifetime of 10 to 15 years. The new catalyst's activity is reportedly comparable to ruthenium (Ru)-on-graphitized carbon (C) catalyst, used in the KAAP ammonia process. Ru-C catalysts, however, are prone to methanation (the carbon may react with hydrogen in the process to form methane), and this can limit catalyst life. The new catalyst is barium promoted Ru on a boron nitride (BN) support. BN has a layered structure similar to that of graphite so it provides similar high activity, but without the methanation problem (Chemical Engineering, 2001).

## References Cited

- African Mining Bulletin, 2001, Ngezi project moves into top gear: African Mining Bulletin, no. 150, July 8, p. 3.
- American Metal Market, 2001a, NovaGold gains stake in Alaska's Donlin Creek site: American Metal Market, v. 109, no. 139, July 19, p. 4.
- 2001b, Precious metals interests forming e-marketplace: American Metal Market, v. 109, no. 139, July 19, p. 2.
- 2001c, South African union optimistic on settlement with gold mines: American Metal Market, v. 109, no. 139, July 26, p. 4.
- Chemical Engineering, 2001, New ruthenium catalyst for ammonia synthesis: Chemical Engineering, v. 108, no. 7, July, p. 19.
- Metal Bulletin, 2001a, Norilsk closer to winning export license: Metal Bulletin, no. 8594, July 23, p. 7.
- 2001b, Placer Dome bails out of Las Cristinas: Metal Bulletin, no. 8593, July 19, p. 8.
- 2001c, Placer Dome power deal: Metal Bulletin, no. 8590, July 9, p. 10.
- 2001d, Platinum and palladium prices head lower: Metal Bulletin, no. 8596, August 2, p. 7.
- Platts Metals Week, 2001a, Crown buys stake in Crown Jewel Gold: Platts Metals Week, v. 72, no. 31, July 30, p. 13.
- 2001b, Daily gold transferred in June down 28.5%—LBMA: Platts Metals Week, v. 72, no. 29, July 16, p. 12.
- 2001c, Gold price reacts to Bank of England auction: Platts Metals Week, v. 72, no. 29, July 16, p. 12.
- 2001d, Idaho's Silver Valley dies as silver mines close: Platts Metals Week, v. 72, no. 28, July 9, p. 2.
- 2001e, Russian gold output higher: Platts Metals Week, v. 72, no. 31, July 30, p. 14.

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:					
July	1,460	1,470	18,900	4,410	26,300
August	1,460	1,400	20,800	4,810	28,500
September	1,510	1,460	22,200	3,900	29,100
October	1,510	1,360	19,000	5,680	27,600
November	1,020	1,170	19,100	5,900	24,700
December	1,440	1,170	23,000	4,450	30,100
January-December p/	15,500	16,400	253,000	55,300	338,000
2001:					
January	1,390 r/	1,370	21,800 r/	4,500	29,000 r/
February	1,280 r/	1,270	19,700	4,320	26,500 r/
March	1,390 r/	1,320	20,500 r/	3,640	26,800 r/
April	1,240 r/	1,180	20,300 r/	4,280 r/	27,000 r/
May	1,290 r/	1,050	20,700	4,620 r/	27,700 r/
June	1,240 r/	1,270 r/	22,200 r/	4,720 r/	29,400 r/
July	W	1,060	20,100	5,830	27,000
January-July	7,820	8,520	145,000	31,900	193,000
Silver	Arizona	Idaho	Nevada	Other States 3/	Total
2000:					
July	W	34,900	57,400	71,300	164,000
August	W	34,800	53,200	73,100	161,000
September	W	34,500	60,900	69,700	165,000
October	W	34,500	45,900	56,700	137,000
November	W	34,500	62,200	66,400	163,000
December	W	34,500	61,200	73,000	169,000
January-December p/	W	416,000	752,000	848,000	2,020,000
2001:					
January	W	20,300	40,900 r/	76,100 r/	137,000 r/
February	W	20,300	42,400 r/	66,000 r/	129,000 r/
March	W	W	46,000 r/	83,500 r/	129,000 r/
April	W	W	37,000	106,000 r/	143,000 r/
May	W	W	50,900	83,200 r/	134,000 r/
June	W	W	59,600	81,800 r/	141,000
July	W	W	43,600	75,900	120,000
January-July	W	40,600	320,000	572,000	933,000

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>				
2000:				
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
2001:				
May:				
Low/date	265.05/2	4.32/8	604.00/1	640.00/14
High/date	292.40/21	4.60/24	6.25/21 and 29	685.00/7
Average	273.14	4.44	613.82	663.41
June:				
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
July:				
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
Year to date:				
Low/date	257.04 April 2	4.22 July 19	479.00 July 31	445.00 July 30
High/date	292.40 May 21	4.87 January 30	645.00 January 10 and 15	1,100.00 January 26
Average	266.98	4.45	592.29	763.37
<u>Handy and Harman:</u>				
2000	278.96	5.00	XX	XX
2001:				
May	272.07	4.44	XX	XX
June	270.23	4.37	XX	XX
July	267.53	4.25	XX	XX
Average year to date	265.85	4.45	XX	XX
<u>London Final: 1/</u>				
2000	279.04	4.95	XX	XX
2001:				
May	272.35	4.43	XX	XX
June	270.23	4.36	XX	XX
July	267.53	4.25	XX	XX
Average year to date	265.85	4.43	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)
<b>Imports for consumption:</b>								
2000	65	39,000	184,000	60	223,000	29,800	6,720	7,970
<b>2001:</b>								
April	2	1,490	12,200	7	13,700	1,540	462	78
May	9	1,950	9,300	1	11,300	984	618	385
<b>June:</b>								
Brazil	--	--	1,360	--	1,360	--	--	53
Canada	--	--	9,610	--	9,610	521	722	--
Chile	--	183	875	--	1,060	--	--	--
Colombia	--	65	196	--	261	--	--	--
Dominican Republic	--	--	14	--	14	289	--	--
Honduras	--	401	--	--	401	--	--	--
Mexico	--	341	44	1	385	430	--	--
Nicaragua	--	146	--	12	157	--	--	--
Panama	--	12	108	--	120	10	--	--
Peru	--	868	12	--	880	3	--	--
Other	4	18	179	--	201	101	69	68 5/
Total	4	2,030	12,400	12	14,500	1,350	791	121
Year to date	19	9,750	82,100	110	91,900	9,330	4,320	1,270
<b>Exports:</b>								
2000	745	106,000	440,000	--	547,000	64,100	1,130	1,390,000
<b>2001:</b>								
April	2	10,400	61,800	--	72,200	5,320	31	18,900
May	8	12,900	62,700	--	75,600	3,690	117	14,100
<b>June:</b>								
Belgium	--	--	--	--	--	110 5/	--	--
Canada	4	566	25	--	595	2,350	8	678 5/
France	1	--	--	--	1	--	--	--
Germany	42	--	--	--	42	56	5	--
Guatemala	--	--	129	--	129	10	--	--
Israel	--	--	--	--	--	--	--	6,720 5/
Italy	--	--	--	--	--	20	2	--
Jamaica	--	--	2	--	2	--	2	--
Japan	--	--	2	--	2	--	1	--
Mexico	1	--	2,100	--	2,100	--	703	--
Netherlands Antilles	--	--	(6/)	--	(6/)	--	1	--
New Zealand	--	--	--	--	--	--	--	356 5/
Peru	--	--	493	--	493	--	--	--
Singapore	--	--	1	--	1	--	1	15 5/
Switzerland	--	5,580	45,200	--	50,800	--	1	--
Trinidad and Tobago	10	--	--	--	10	--	--	--
United Arab Emirates	--	--	2,140	--	2,140	--	--	--
United Kingdom	3	2,210	2,240	--	4,450	1,300	2	355
Other	--	--	64 5/	--	64	1 5/	(6/)	37 5/
Total	61	8,350	52,400	--	60,800	3,850	725	8,160
Year to date	176	46,700	333,000	--	380,000	24,900	1,590	411,000

-- 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/ 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 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:										
April	217,000	--	-- r/	4,240 r/	221,000 r/	3,340	591	8,060	25,800 r/	41,200 r/
May	214,000	13,400	2,610	3,080	233,000	9,430	204	--	12,900	61,000
June:										
Brazil	--	--	--	--	--	--	--	--	10,200	2
Canada	81,900	--	--	961	82,900	21,700	--	--	95	122,000
Chile	--	13,900	--	--	13,900	--	--	--	--	--
China	11,500	--	--	--	11,500	--	--	--	--	--
Colombia	--	--	--	--	--	318	--	--	--	4
Dominican Republic	--	--	--	--	--	--	--	--	--	663
France	--	--	--	--	--	--	--	--	94	--
Germany	--	--	--	--	--	--	--	--	2,460	20,000
Guyana	--	--	--	--	--	--	--	--	--	55
Hong Kong	--	--	--	--	--	--	--	--	--	676
Israel	--	--	--	--	--	--	--	--	--	--
Italy	--	--	--	--	--	--	44	--	135	1
Japan	--	--	--	--	--	--	420	60 5/	200	--
Jordan	--	--	--	--	--	--	--	--	--	3
Korea, Republic of	--	--	--	--	--	--	--	--	1,630	97
Malaysia	--	--	--	--	--	--	--	--	--	32
Mexico	70,200	13,300	--	790	84,200	15,400	--	--	938	5,620
Netherlands	--	--	--	--	--	--	--	--	39	--
New Zealand	--	--	--	--	--	--	--	--	--	27
Panama	113	--	--	--	113	--	--	--	--	3
Peru	14,100	--	--	--	14,100	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	--	176
Russia	--	--	--	--	--	107	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	128
Spain	--	--	--	--	--	--	--	--	--	20
United Kingdom	--	--	--	1,400	--	--	--	--	288	243
Zimbabwe	--	--	--	--	--	--	--	--	--	104
Other	--	19	--	--	19	(6/) 5/	15 5/	--	220	153
Total	178,000	27,200	--	3,150	207,000	37,600	480	60	16,300	150,000
Year to date	1,370,000	54,400	2,610	19,000	1,440,000	137,000	19,200	25,400	80,300	378,000

-- 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:									
April	76,600	2,760	6,940	86,300	2,500	16,100	15,000	14,500	103,000
May	38,700	1,510	24,700	64,900	5,880	13,000	20,300	15,100	191,000
June:									
Belgium	--	--	--	--	--	55	--	--	12,100
Brazil	--	--	--	--	--	--	--	304	--
Canada	4,580	--	--	4,580	53	1,570	8,610	3,740	34,800
China	--	--	--	--	--	--	--	--	24,300
Colombia	--	--	485	485	--	--	--	176	--
Dominican Republic	--	--	--	--	327	--	--	--	--
Finland	--	--	--	--	--	442	--	--	--
France	--	--	--	--	--	1,090	--	183	--
Germany	--	--	--	--	--	925	--	241	6,880
Hong Kong	--	--	--	--	6 4/	53	--	588	30
India	--	--	--	--	--	--	--	--	279
Italy	--	--	--	--	--	40	--	292	23,100
Japan	--	--	--	--	--	448	--	2,260	558
Korea, Republic of	--	--	--	--	25 4/	2,180	--	101	197
Lebanon	--	--	--	--	--	64	--	--	--
Mexico	15	--	32,300	32,300	--	534	249	1,870	--
Netherlands	--	--	--	--	4 4/	--	--	22	--
Netherlands Antilles	--	--	--	--	67	--	--	--	--
Saudi Arabia	--	--	--	--	23	--	--	--	6,090
Singapore	--	--	41	41	8 4/	75	--	58	--
South Africa	--	--	--	--	--	--	--	--	1,780
Spain	--	--	--	--	53	--	--	1,090	--
Sweden	--	--	--	--	--	3 4/	--	--	--
Switzerland	--	531	--	531	--	--	40	15	--
Taiwan	--	--	--	--	1,530	355	--	184	--
Trinidad and Tobago	--	--	--	--	--	--	--	68	--
United Kingdom	38,000	209	884	39,100	--	227 4/	--	65	1,200
Uruguay	1,700	--	--	1,700	--	--	--	--	--
Other	36	--	--	36	93	18	--	109	74
Total	44,300	740	33,700	78,700	2,090	8,060	8,900	11,300	111,000
Year to date	227,000	6,890	99,600	334,000	19,500	119,000	98,200	86,300	816,000

-- 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:												
April	272	5,380	94	471	235	14	10,900	1,680	193	5	601	707
May	247	5,230	514	315	143	(4/)	4,700	4,130	222	9	446	2,190
June:												
Austria	--	--	--	--	--	--	--	--	--	--	--	70
Belgium	--	165	--	71 5/	--	--	328	14	--	--	--	153
Brazil	--	--	--	--	71	--	--	--	--	--	--	--
Canada	1	--	--	67	35	--	252	--	--	--	--	--
Chile	--	--	--	--	7	--	--	--	--	--	--	--
China	--	--	--	--	--	--	30 5/	--	--	--	--	--
Colombia	--	--	17	--	(4/)	--	--	--	--	--	--	--
Finland	--	--	--	--	2	--	--	--	--	--	--	--
France	--	--	(4/)	--	--	--	--	--	--	--	--	--
Germany	16	507	25	242	25	--	471	255	--	--	91	7 5/
India	--	--	--	--	--	--	31	--	--	--	--	--
Ireland	--	--	--	(4/)	--	--	--	--	--	--	--	--
Israel	--	--	51	--	--	--	--	--	--	--	--	--
Italy	--	39	--	--	--	--	6	34	--	--	--	--
Japan	--	--	--	165	--	--	419	30	--	--	--	--
Mexico	--	--	--	--	14	--	--	--	--	--	--	--
Netherlands	--	--	--	--	--	--	--	1	--	--	--	--
Norway	--	16	--	--	--	--	204	--	--	--	--	--
Russia	--	--	265	--	--	--	5,280	61	--	--	--	621
South Africa	249	4,400	436	6	1	--	3,830	163	66	--	599	598
Switzerland	--	--	13	189 5/	--	(4/)	255	86	--	--	--	--
Taiwan	--	--	--	--	3	--	--	--	--	--	--	--
United Kingdom	--	642	134	25	33	--	3,650	43	127 5/	--	5	192 5/
Total	265	5,770	941	766	191	(4/)	14,800	685	194	--	694	1,640
Year to date	1,620	33,900	2,270	2,620	1,990	23	120,000	9,220	2,050	42	3,190	6,560

-- 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	2,260	2,820	2,590	87	91
May	3,520	2,070	1,590	254	79
June:					
Australia	14	2	--	--	--
Austria	--	1	--	--	--
Bahrain	--	(4/)	--	--	--
Belgium	10	10	5	--	--
Bermuda	--	--	--	1	--
Brazil	--	277	--	--	--
Canada	59	202	38	1	(4/)
China	3	--	--	--	--
Cyprus	(4/)	--	--	--	--
Denmark	5	5	--	--	--
France	30 5/	38	--	(4/)	--
Germany	213 5/	301	10	2	--
Hong Kong	52 5/	7	--	1	1
Hungary	--	3	--	--	--
India	--	3	--	--	--
Ireland	--	11	--	(4/)	--
Israel	10	--	--	--	--
Italy	54 5/	9	--	--	--
Japan	682	729	107	--	--
Korea, Republic of	653	3	--	--	--
Malaysia	2	5	--	--	1
Mexico	4 5/	17 5/	--	--	--
Netherlands	(4/)	1	--	--	--
New Zealand	6	--	--	--	--
Philippines	11	--	--	--	--
Romania	--	--	--	(4/)	--
Saudi Arabia	--	1	--	(4/)	--
Singapore	4	--	--	--	(4/)
Slovenia	10	--	--	--	--
South Africa	--	--	2	--	--
Spain	20 5/	1	--	--	--
Sweden	--	1 5/	--	--	--
Switzerland	10	827	--	--	--
Taiwan	2	2	--	--	--
Thailand	1	(4/)	--	--	--
Turkey	2	--	--	--	--
United Arab Emirates	2 5/	--	--	--	(4/)
United Kingdom	150 5/	171	446	77	1
Total	2,010	2,630	607	83	2
Year to date	24,600	16,900	8,010	806	858

-- 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/ 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 8  
LEADING GOLD-PRODUCING MINES IN THE UNITED STATES FOR THE FIRST 6 MONTHS IN 2001, IN ORDER OF OUTPUT 1/

Rank	Mine	County and State	Operator	Kilograms
1	Newmont Nevada operations 2/ 3/	Various counties, NV	Newmont Gold Company	41,600
2	Betze-Post / Goldstrike	Eureka, NV	Barrick Gold Corporation	26,600
3	Cortez	Lander, NV	Placer Dome Inc.	18,600
4	Round Mountain	Nye, NV	Round Mountain Gold Corporation	12,300
5	Meikle/ Goldstrike	Elko, NV	Barrick Gold Corporation	10,800
6	Bingham Canyon 4/	Salt Lake, UT	Kennecott Utah Copper Corp.	10,300
7	Jerritt Canyon	Elko, NV	Independence Mining Company, Inc.	7,000
8	Fort Knox 5/	Fairbanks, AK	Fairbanks Gold Mining Inc.	6,400
9	Golden Sunlight	Jefferson, MT	Placer Dome Inc.	3,700
10	Cresson	Teller, CO	Cripple Creek & Victor Gold Mining Co.	3,400
11	Homestake	Lawrence, SD	Homestake Mining Company	3,200
12	Barney's Canyon	Salt Lake, UT	Kennecott Barney's Canyon Mining Co.	2,100
13	Ruby Hill	Eureka, NV	Homestake Mining Company	2,000
14	Mesquite 3/	Imperial, CA	Newmont Gold Company	2,000
15	McLaughlin	Napa, Yolo, CA	Homestake Mining Company	1,800
16	Bald Mountain	White Pine, NV	Placer Dome Inc.	1,700
17	Wharf	Lawrence, SD	Wharf Resources, Ltd.	1,700
18	Denton-Rawhide	Mineral, NV	Kennecott Rawhide Mining Co.	1,700
19	McCoy/ Cove	Lander, NV	Echo Bay Mines Limited	1,550
20	Castle Mountain	San Bernardino, CA	Viceroy Resource Corporation	1,500
21	Marigold	Humboldt, NV	Glamis Gold Ltd.	1,400
22	Briggs	Inyo, CA	Canyon Resources Corp.	1,400
23	Greens Creek	Skagway-Hoonah-Angoon, AK	Kennecott Greens Creek Mining Co.	1,400
24	Rochester	Pershing, NV	Coeur d'Alene Mines Corp.	1,200
25	Rand	Kern, CA	Glamis Rand Mining Co.	900
26	Kettle River	Ferry, WA	Echo Bay Mines Limited	850
XX	Diamond Hill	Broadwater, MT	Diamond Hill Mining Co.	(6/)
XX	Florida Canyon	Lander, NV	Florida Canyon Mining, Inc.	(6/)
XX	Ken Snyder	Elko, NV	Euro-Nevada Mining Co.	(6/)
XX	Montana Tunnels	Jefferson, MT	Montana Tunnels Mining, Inc.	(6/)

XX Not applicable.

1/ Data are rounded to no more than three significant digits; these mines accounted for more than 99% of the U.S. gold production in the first half of 2001.

2/ Includes Carlin Mines Complex, Lone Tree, and Twin Creeks.

3/ Mill output.

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

5/ Mine production refers to gold equivalent produced.

6/ Production at Diamond Hill, Florida Canyon, Ken Snyder, and Montana Tunnels are withheld; mines are among the top 30 gold-producing mines in the United States, but are not shown in rank in order to avoid disclosing company proprietary data.

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