

# **Mineral Industry Surveys**

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#### PRECIOUS METALS IN FEBRUARY 2000

U.S. mines produced 26,400 kilograms (kg) of gold and 159,000 kg of silver in February 2000. Compared with January, production of gold was down by 8% in Nevada, and silver production was up by 9% in Nevada. Nevada is the largest producer of gold and silver in the United States. Table 8, at the end of this report, lists the top 30 gold-producing mines in the United States in 1999.

#### Gold

**Domestic.**—Battle Mountain Gold Co. filed a petition with the Okanogan County Superior Court to obtain water rights and water quality permits needed to further develop the Crown Jewel gold project in Washington State. The petition sought reinstatement of previously won water rights and water quality permits that the Crown Jewel gold project had obtained from the State's Department of Ecology in 1997 and again in 1999. A pollution and control hearings board reversed the Department of Ecology's decision last January (American Metal Market, 2000b).

*International.*—Gold transactions on the London bullion market were sharply higher during February. The average daily turnover was 0.93 million kg of gold, up 35% from January as the average price of gold rose \$15 per troy ounce (Platt's Metals Week, 2000c).

A World Gold Council (WGC) survey indicated that 48% of the British public opposed the sale of 415,000 kg of Britain's national gold reserves. The survey respondents said that they believed Britain's reserves should remain above 30% gold, as in most other European Union countries (American Metal Market, 2000d). As part of an advertising campaign to halt the government sale of gold reserves, the WGC initiated a lottery for 100 gold sovereigns valued at \$110 each. The public was invited to register for the lottery to show opposition to the gold sales and participate in a drawing for the 22-karat gold sovereigns, which weigh almost 8

grams (American Metal Market, 2000e).

The Bank of England reported that it will continue a series of gold sales from the United Kingdom's (UK) gold reserves with 6 auctions starting in May. The sales will total 150,000 kg of gold with each auction offering about 25,000 kg of gold, and will be conducted every other month on a single-price basis through the Bank of England. The last auction in the initial series of UK gold sales announced in May 1999 is scheduled to be held March 21, 2000 (American Metals Market, 2000c).

Australian gold mine production was 301,000 kg in 1999, about 3% lower than the peak production reached in 1998. Lower gold output in 1999 was due to lower production from 4 of the top 5 Australian gold mines. Super Pit was down 2,000 kg, and the combined output by Telfer, Granny Smith, and St. Ives was also down 2,000 kg (American Metal Market, 2000a).

South Africa's gold mine output continued to decline in 1999, ending the year at 449,500 kg of gold which was 3.2% lower than in 1998. Gold output from South Africa, the world's largest gold producer, peaked in 1970, when about 1 million kg of gold was produced (Platt's Metals Week, 2000d).

*Update.*—The Bank of China has planned to issue the world's largest gold coin, which weighs 10 ounces and is worth more than \$3,500. It is one in a set of 4 gold coins and 3 silver coins that will be released for the new millennium. The other gold coins will weigh 5 ounces, one-half ounce, and one-tenth ounce. For silver, the bank will produce 1-kg, 5-ounce, and 1-ounce coins (The Gold Institute, 2000).

#### Silver

China has ended its unified buying and selling of silver and opened the silver market for the first time since 1949. The Shanghai-based Huatong Nonferrous Metal Trading Center was designated as the first market to operate silver trade in the country

as of January 1, 2000. After opening the market, China will encourage silver exports and limit imports. China produces about 1,300 tons of silver per year and consumes about 800 tons per year (Platt's Metals Week, 2000a).

Peru's Energy and Mines Ministry released output figures for 1999, indicating that the country produced significantly more precious metals than in 1998. Silver production increased to 2,220 metric tons (t) compared with 2,020 t in the previous year. Gold production increased to 126 t from 93 t in 1998. Copper, lead, iron ore, and zinc production also increased in the year (Mining Journal, 2000a).

#### **Platinum-Group Metals**

Ursa Major International Inc. optioned a PGM property 50 kilometers (km) west of Sudbury, Ontario, in Porter Township. The 12.5-km² area contains recently discovered PGM mineralization in a gabbro intrusion. Ursa reported channel samples of up to 9.7 grams per ton of combined PGM. PGM mineralization in the Sudbury area has been the subject of growing interest in past months, after Anglo American Platinum Corp. Ltd. (Amplats) and Impala Platinum Holdings (Implats), the world's largest primary PGM producers, signed respective joint-venture agreements with Pacific Northwest Capital Corp. and Mustang Minerals. The Pacific Northwest-Amplats agreement relates to a property located in the River Valley area, northeast of Sudbury, also the location of the property in the Mustang-Implats agreement (Mining Journal, 2000b).

The U.S. Defense Logistics Agency (DLA) asked the U.S. Mint to return 6,218.66 kg of platinum loaned in 1997 for the Mint's American Eagle Bullion program. DLA requested the return of the metal so that it could complete its fiscal year 2000 sales and prepare for its fiscal year 2001 sales. Under its Annual Materials Plan for fiscal year 2000, DLA is authorized to sell 3,887.94 kg of platinum in fiscal year 2000. DLA is also authorized to sell 3,887.94 kg of platinum in fiscal year 2001 and needs the material from the Mint to complete those sales. DLA requested that 50%

of the material be returned by March 31, 2000, and the balance returned by June 30, 2000, so that the agency would be positioned to offer the material for sale by October 1, 2000 (Platt's Metals Week, 2000b).

*Update.*—The Defense National Stockpile Center (DNSC) announced on April 7, 2000 that the quantity of platinum authorized for sale under its fiscal year 2000 Annual Materials Plan has been exhausted. For more detailed information on DNSC's last sale, please access DNSC's web page at http://www.dnsc.dla.mil (Defense National Stockpile Center, 2000).

#### **References Cited**

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- Defense National Stockpile Center, 2000, News release: DNSC-00-1727, April 7, p. 1.
- Mining Journal, 2000a, Peruvian metal output rises: Mining Journal, v. 334, no. 8569, February 11, p. 115.
- ——2000b, Sudbury PGM position: Mining Journal, v. 334, no. 8569, p. 113. Platt's Metals Week, 2000a, China opens silver market: Platt's Metals Week, v. 71, no. 8, February 21, p. 4.
- ——2000b, DLA requests return of loaned platinum from U.S. Mint: Platt's Metals Week, v. 71, no. 6, February 7, p. 14.
- ——2000c, Gold, silver clearing figures improve: Platt's Metals Week, v. 71, no. 12, March 20, p. 8.
- ——2000d, South Africa gold output down: Platt's Metals Week, v. 71, no. 9, February 28, p. 7.
- The Gold Institute, 2000, Gold snapshot—China to issue world's largest coin: The Gold Institute, January/February, p. 3.

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

# (Kilograms)

-					
				Other	
Gold	Alaska	California	Nevada	States 2/	Total
1999: p/					
February	1,210	1,170	20,700	3,690	26,800
March	1,310	1,440	20,900	4,270	27,900
April	1,380	1,440	21,400	4,350	28,600
May	1,340	1,460	21,700	4,180	28,600
June	1,310	1,520	22,600	4,270	29,700
July	1,390	1,420	20,200	4,400	27,400
August	1,390	1,350	21,100	4,350	28,200
September	1,360	1,370	21,300	4,300	28,300
October	1,260	1,540	21,400	4,390	28,600
November	1,180	1,640	21,800	4,410	29,100
December	1,260	1,810	21,400	4,580	29,100
January-December	14,400	16,200	235,000	47,200	312,000
2000:					
January	1,260 r/	1,550	21,100 r/	4,300	28,300 r/
February	1,260	1,470	19,500	4,210	26,400
January-February	2,520	3,020	40,600	8,510	54,700
				Other	
Silver	Arizona	Idaho	Nevada	States 3/	Total
1999: p/					
February	14,700	31,200	49,000	56,900	152,000
March	17,600	34,600	67,100	60,800	180,000
April	16,500	34,500	46,000	71,000	168,000
May	17,200	35,700	42,400	67,200	162,000
June	16,200	34,500	48,100	69,000	168,000
July	16,600	35,700	36,900	67,800	157,000
August	14,600	35,700	37,100	63,900	151,000
September	13,900	34,900	45,100	62,500	156,000
October	13,500	35,700	46,100	63,000	158,000
November	12,100	34,900	39,000	61,000	147,000
December	14,700	34,900	72,400	61,900	184,000
January-December	168,000	382,000	529,000	705,000	1,780,000
2000:			/,		.,,
January	W	34,900	58,500 r/	63,100 r/	157,000
February	W	34,900	63,700	60,800	159,000
January-February	W	69,900	122,000	124,000	316,000
	**	07,700	122,000	121,000	310,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data.

 $<sup>1/\,\</sup>text{Data}$  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, and Washington.

<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
Engelhard Industries:				
1999:				
Low/date	253.88 (July 20)	4.91 (January 4, April 14,		
		May 28, and June 4)	344.00 (January 28)	293.00 (May 4)
High/date	326.70 (October 5)	5.75 (September 28)	457.00 (November 16)	456.00 (December 29)
Average	279.91	5.25	378.94	363.20
2000:				
January:				
Low/date	280.52/6	5.13/18	416.00/6	437.00/6
High/date	289.24/20	5.39/27	497.00/28 and 31	490.0/31
Average	285.45	5.23	443.30	457.65
February:				
Low/date	284.13/1	5.09/28	475.00/25	491.00/1
High/date	313.88/7	5.53/7	573.00/17	815.00/22
Average	300.75	5.29	519.95	637.40
March:				
Low/date	276.87/30	4.95/30	470.00/2 and 3	605.00/31
High/date	294.05/1	5.18/21	504.00/22	725.00/15
Average	287.53	5.10	483.74	679.39
Year to date				
Low/date	276.87 (March 30)	4.95 (March 30)	416.00 (January 6)	437.00 (January 6)
High/date	313.88 (February 7)	5.53 (February 7)	573.00 (February 17)	815.00 (February 22)
Average	291.24	5.21	482.33	591.48
Handy and Harman:				
1999	278.81	5.25	XX	XX
2000:				
January	284.26	5.23	XX	XX
February	299.60	5.30	XX	XX
March	286.39	5.10	XX	XX
Average year to date	290.08	5.21	XX	XX
London Final: 1/				
1999	278.77	5.22	XX	XX
2000:				
January	284.32	5.19	XX	XX
February	299.86	5.25	XX	XX
March	286.39	5.06	XX	XX
Average year to date	290.19	5.17	XX	XX
VV Not applicable				

XX Not applicable.

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

Source: Platt's Metals Week.

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

(Kilograms of gold content, unless otherwise specified)

	Ores and	Doré and	Refined	Ash and		Waste and scrap	Metal powder	Gold compounds
Period and country	concentrates 2/	precipitates	bullion 3/	residues	Total 4/	(gross weight)	(gross weight)	(gross weight)
Imports for consumption:								
1999:								
November	8	3,570	21,400	29	25,000	3,190	457	1,330
December	3	2,950	11,400	1	14,400	5,760	190	1,230
Year	117	24,300	196,000	133	220,000	30,500	5,500	9,400
2000:								
January:								
Aruba			105		105			
Brazil			1,100		1,100			98
Canada			9,330		9,330	332	113	
Chile		233	565		799			
Colombia		68	1,010		1,080			221
Dominican Republic						297		
Honduras		124	77		201			
Mexico		443	108		550	211	3	
Nicaragua		65	193	(5/)	258			
Peru		674	1,570		2,240			
Switzerland			317		317		9	
Uruguay			594		594			
Other	1	163	227		391	161	3	4
Total	1	1,770	15,200	(5/)	17,000	1,000	129	323
Exports:								
1999:								
November	9	7,910	97,100		105,000	4,310	24	28,600
December	1	9,870	67,800		77,600	7,120	43	24,400
Year	117	87,300	435,000		523,000	40,000	270	561,000
2000:			,		,			
January:								
Belgium						105		
Canada		474	14		488	1,870	9	1,110
Israel								6,960
Italy						231		
Korea, Republic of			10		10			7,810
Mexico		336	2,540		2,880		146	119
Peru			484		484			
Philippines	1				1			
Sweden						111		
Switzerland		7,730	49,700		57,500			
United Kingdom		7,730	8,070		8,070	3,970	11	151
Other		13	108		121	3,970 49	1	10
Total	1	8,550	61,000		69,500	6,340	168	16,200
Zero.	1	8,330	01,000		09,300	0,340	108	10,200

<sup>--</sup> 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.

#### TABLE 4 U.S. IMPORTS AND EXPORTS OF SILVER, REFINED AND AS NITRATE 1/

## (Kilograms)

	Bullion	Doré	Total	Other unwrought silver	Metal powder	Silver nitrate
Period and country	(silver content)	(silver content)	(silver content)	(gross weight)	(gross weight)	(gross weight)
Imports for consumption:	_					
1999:	_					
November	_ 214,000	17,700	232,000	24,500	10,200	
December	209,000	10,900	220,000	3,360	13,800	1,080
Year	2,660,000	404,000	3,060,000	126,000	120,000	4,450
2000:	_					
January:						
Brazil					813	
Canada	95,500		95,500	14,600	16	
Chile		10,200	10,200			
Germany	<del></del>				801	
Japan	 				3,020	
Mexico	122,000 2/	5,400	128,000		·	
Nicaragua	75		75			
Peru	16,500		16,500			
Russia	34,100		34,100			
Other	(3/)		(3/)	23	42	
Total	268,000	15,600	284,000	14,700	4,690	
Exports:		15,000	201,000	1,,,00	.,0,0	
1999:	-					
November	15,900	2,420	18,400	4,900	25,300	22,400
December	3,070	5,070	8,130	6,770	32,100	9,240
Year	481,000	64,400	545,000	75,100	318,000	62,500
2000:		04,400	343,000	73,100	310,000	02,300
January:	_					
Australia	-					227
Canada			<del></del>	265	1,340	1,080
Dominican Republic				527	1,540	1,080
France	- <del></del>					
					1,460	
Germany	- 17.000		17.000	444	496	
Japan	_ 17,000		17,000	127	6,450	
Korea, Republic of	- 1.000	1.070	2.560		1,070	17.200
Mexico	_ 1,690	1,870	3,560	17		17,200
Netherlands				23	892	
Singapore					73	
Sweden	<del></del>				915	
Switzerland		1,080	1,080	<del></del>		
Taiwan		239	239	2,850	1,220	
Thailand	_			402		
United Kingdom	_ 38,200	262	38,400	8	1,950	
Other				21	48	
Total	56,900	3,450	60,300	4,690	15,900	18,500

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown. 2/ All or part of these data have been referred to the Bureau of the Census for verification.

<sup>3/</sup> Less than 1/2 unit.

TABLE 5  $U.S.\ IMPORTS\ AND\ EXPORTS\ OF\ SILVER,\ RAW,\ SEMIMANUFACTURED,\ AND\ WASTE\ AND\ SCRAP\ 1/NORMANUM AND\ AND\ SCRAP\ 1/NORMANUM AND\$ 

(Kilograms of silver content, unless otherwise specified)

Deried and country	Silver ores and	Base metal ores and	Ash and	Tatal	Semimanu- factured form 2/3/	Waste and scrap
Period and country Imports for consumption:	concentrates	concentrates	residues	Total	(gross weight)	(gross weight)
1999:						
November	. 80		9,790	9,870	30,100	63,500
December	81		4,740	4,820	8,580	23,700
Year	10,800	2,750	101,000	115,000	139,000	1,640,000
2000:		=,	,	,	,,	-,0.0,000
January:						
Argentina						15,700 4/
Canada	36		3,670	3,700	3,980	78,600 4/
Dominican Republic						971
France					101	
Germany					1,370 4/	20,100 4/
Indonesia					71	
Japan					105 4/	
Korea, Republic of					42	2,970 4/
Malaysia						4,210
Mexico			3,740	3,740	1,390	19,500 4/
Peru	<del></del>					406
Poland	<del></del>				811	
Singapore						184 4/
Taiwan	<b></b>					38,400 4/
United Arab Emirates						87,300 4/
United Kingdom			1,700	1,700	254 4/	9
Other	<u> </u>				27 4/	14 4/
Total	. 36		9,100	9,140	8,150	268,000
Exports:						
1999:						
November	. 44			44	7,690	98,300
December					9,040	99,000
Year	70,800			70,800	122,000	1,310,000
2000:						
January:					50	
Argentina	<del></del>				50	9.240
Belgium Brazil	. <del></del>				574 82	8,340 617
Canada	7,800			7,800	21,500	51,100
China	. 7,800			7,800	21,300	6,700
France					967	0,700
Germany					115	4,530
Hong Kong	. <u></u>				30	94
Ireland						6,140
Italy					218	2,760
Japan	240			240	161	3,580
Mexico	. 210				703	518
New Zealand					73	
Poland						256
Singapore					60	
South Africa						2,260
Spain					1,310	
Sweden						4,970
Switzerland					50	19
Taiwan					1,210	
United Kingdom					288	3,360
Other					89	· ==
Total	8,040			8,040	27,500	95,200

<sup>--</sup> Zero.

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

<sup>2/</sup> Containing 99.5% or more by weight of silver. Imports only.

<sup>3/</sup> Semimanufactured (including silver plated with gold or platinum) forms of silver.
4/ All or part of these data have been referred to the Bureau of the Census for verification.

TABLE 6
U.S. IMPORTS OF PLATINUM-GROUP METALS 1/

(Kilograms of metal content, unless otherwise specified)

	Platinum		Other		Platinum							
	grain and	Platinum	unwrought	Platinum,	waste and	Platinum	Unwrought	Palladium,		Unwrought	Unwrought	
Period and country	nuggets	sponge	platinum	other	scrap	coins	palladium	other	Iridium 2/	osmium	ruthenium	Rhodium 3/
Imports for consumption:												
1999:												
November	2,190	5,510	251	705	16,000	7	14,200	566	78		1,440	539
December	143	5,010 4/	2,220	926 4	142 4	/ 2	17,200	2,920 4/	181 4/		1,210	564 4
Year	6,100	78,300	7,820	16,500	19,700	169	165,000	24,100	2,270	23	11,400	10,500
2000:												
January:												
Belgium	129	142					1,000					4
Canada	1			53	9,030		238		(5/)			
China							45	70				7
Colombia			33									
France					(5/)							
Germany		319	51	94	110		399	115				41
Honduras							11					
Hong Kong					(5/)							
Indonesia			2									
Israel			23									
Italy		27			37		26	(5/)				
Japan	12			13	(5/)		807 4/	/ 29				2
Malaysia					1							
Mexico	19				2		3					2
Mongolia						1						
Netherlands				1 4	/							
Norway							31					
Russia			6				87	11,100				5,000
South Africa	47	2,210					2,120	85	695 4/		1,400	426
Spain				10								
Switzerland				154 4	/		6	54				6
Taiwan				(5/)	3							
United Kingdom	44	312		59	2		574	129	71		50	
Total	252	3,010	115	382	9,190	1	5,350	11,600	766		1,450	5,490

<sup>--</sup> 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 Bureau of the Census for verification.

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

# $\label{eq:table 7} \text{U.S. EXPORTS OF PLATINUM GROUP METALS 1/}$

(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/
Exports:	1 anadrum 2/	Tratificant 2/	зепар	rumemum 2/ 3/	Kilodiulii 2/
1999:	_				
November	5,760	1,450	692	130	8
December	3,360	2,440	289	41	15
Year	- 43,900 r/	19,400	7,660	851	114
2000:		15,.00	7,000		
January:	_				
Argentina	- 	(4/)		<u></u>	
Australia	- 3	2			
Belgium	- 176	8			
Brazil		2			
Canada	- 112	115	24		
Chile	- 6	250			
China	- 293				
Cyprus	- 2				
Denmark	- 2 16	2		12	
Finland	- (4/)	1			
France	- ( <del>*/</del> )	16			
Germany	- 259	453	421	18	37
Greece		5	721		
Hong Kong		951			(4/)
India				<u></u>	(4/)
Ireland	- 80	3		13	(4/)
Israel	- 605				
Italy	- 14	16			
Japan	- 1,470	447	25		
Korea, Republic of	- <sup>1,470</sup>	(4/)			
Malaysia	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	( <del>-</del> //			
Mexico	- <u>'</u>	4	1		(4/)
Netherlands		5			(4/)
New Zealand	- 3				
Norway	- 12				
Singapore	- 4	1			
South Africa	- 268	15	(4/)		122
Spain	- <sup>208</sup> 38	31	(4/)		122
Sweden	- 15	6	3	1	
Switzerland	- <sup>13</sup> 58	2,430	<i>5</i>	4	
Taiwan	- 1,080	102		<b>-</b>	
Thailand	- 7	4		<del></del>	
Turkey	_		(4/)	 	
United Kingdom	- 170	1,480	297	58	
Total	4,800	6,350	771	106	171

r/ Revised. -- 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.

 ${\bf TABLE~8}$  LEADING GOLD-PRODUCING MINES IN THE UNITED STATES IN 1999, IN ORDER OF OUTPUT 1/

-		County and		Kilograms
Rank	Mine	State	Operator	produced
1	Carlin Mines Complex	Eureka, Elko, etc., NV	Newmont Gold Co.	42,600
2	Cortez	Lander, NV	Placer Dome Inc.	41,300
3	Betze-Post/ Goldstrike	Eureka, NV	Barrick Gold Corp.	35,100
4	Meikle/ Goldstrike	do.	do.	30,400
5	Twin Creeks	Humboldt, NV	Newmont Gold Co.	27,300
6	Round Mountain	Nye, NV	Smokey Valley Common Oper.	16,900
7	Bingham Canyon	Salt Lake, UT	Kennecott-Utah Copper Corp.	11,400
8	Jerritt Canyon	Elko, NV	Independence Mining Co.	11,300
9	Fort Knox	Fairbanks, AK	Amax Gold Inc.	10,900
10	Cresson	Teller, CO	Cripple Creek & Victor Gold Mining Co.	7,200
11	Homestake	Lawrence, SD	Homestake Mining Corp.	6,600
12	Lone Star	Humboldt, NV	Newmont Gold Co.	6,000
13	Ken Snyder	Elko, NV	Euro-Nevada Mining Co.	5,400
14	Mesquite	Imperial, CA	Newmont Gold Co.	5,100
15	Golden Sunlight	Jefferson, MT	Placer Dome Inc.	4,500
16	Beartrack	Lemhi, ID	Meridan Gold Corp.	4,100
17	McCoy/ Cove	Lander, NV	Echo Bay Mines, Ltd.	3,900
18	Ruby Hill	Eureka, NV	Homestake Mining Corp.	3,850
19	McLaughlin	Napa, CA	do.	3,800
20	Denton-Rawhide	Mineral, NV	Kennecott Rawhide Mining Co.	3,600
21	Rosebud	Pershing, NV	Hecla Mining Co.	3,500
22	Barney's Canyon	Salt Lake, UT	Kennecott Corp.	3,500
23	Getchell	Humboldt, NV	Getchell Gold Corp.	3,450
24	Wharf	Lawrence, SD	Wharf Resources, Ltd.	3,300
25	Bald Mountain	White Pine, NV	Placer Dome (U.S.) Inc.	3,300
26	Kettle River	Ferry, WA	Echo Bay Mines, Ltd.	3,200
27	Castle Mountain	San Bernardino, CA	Viceroy Gold Corp.	3,000
28	Briggs	Inyo, CA	Canyon Resources Corp.	2,700
29	Ridgeway	Fairfield, SC	Kennecott Ridgeway Mining Co.	2,500
(2/)	Florida Canyon	Lander, NV	Florida Canyon Mining, Inc.	W

W Withheld to avoid disclosing company proprietary data.

Source: Company annual reports, Security Exchange Commission's 10K and 6K reports, or company news releases.

<sup>1/</sup> Data are rounded to no more than three significant digits; these mines accounted for more than 92% of the U.S. gold production in 1999.

<sup>2/</sup> Production at Florida Canyon is withheld; mine is among the top 30 gold-producing mines in the United States, but is not shown in rank in order to avoid disclosing company proprietary data.