



Mineral Industry Surveys

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GOLD IN MARCH 2004

U.S. mines produced 21,400 kilograms (kg) of gold in March 2004, according to the U.S. Geological Survey, a 17% increase compared with that of February 2004. Production of gold was up 19% in Nevada over the same period. Gold production for the first quarter of 2004 was 4% less than that of the first quarter of 2003 and the year-on-year monthly comparison was 3% less than that of March 2003. Table 4 in this report lists the top 30 gold-producing mines in the United States for 2003.

Domestic.—Two organizations, Great Basin Mine Watch and Western Shoshone Defense Project, appealed the U.S. Bureau of Land Management's (BLM) approval of Newmont Mining Corp.'s Phoenix gold-copper project near Battle Mountain, NV, for environmental reasons. Phoenix is in an historic mining district south of Battle Mountain that was previously owned by Battle Mountain Gold Co. and was acquired by Newmont a few years ago. Newmont's plans for Phoenix are to expand open pits at Copper Canyon and to build a mill to process gold and copper that will be mined at the site over the next 28 years. Phoenix is expected to be in operation in 2006, producing more than 12,400 kg (400,000 troy ounces) of gold per year. The objection from the organizations is over the amount of money Newmont is being asked to set aside for long-term monitoring for possible groundwater contamination from the old mine workings already at the mine site. Also, the petitioners accused BLM of not adequately looking at how the site might be cleaned up without new mining. BLM's contention in the environmental documents is that the Phoenix project, with its proposed cleanup of old mines as well as plans for concurrent reclamation while mining, is the best way to clean up the site (Platts Metals Week, 2004c).

Newmont reported that its roaster facility in Nevada has been temporarily shut down owing to a failure at the oxygen plant. The 3-week downtime was used for maintenance that was originally scheduled for the second quarter of 2004. The interruption deferred about 930 kg (30,000 ounces) of gold sales

from the first and second quarters of 2004 to the second half of 2004 (Platts Metals Week, 2004f).

Exploration is booming, as evidenced by the number of drilling rigs operating in Nevada, the world's third leading gold producer behind South Africa and Australia. Exploration is going on at major mining operations as well as new sites, as the demand for drilling rigs has surged. The number of claims filed at county courthouses in Nevada has increased significantly since October 2003. Most of the rigs are in northern Nevada, although one is at the Esmeralda Mine near Hawthorne, and there are rigs at Goldfields and Round Mountain. In northern Nevada, rigs are busy at the Cortez, Marigold, Goldstrike, Twin Creeks, Lone Tree, Phoenix, and Gold Quarry Mines. Drilling at the Jerritt Canyon Mine has been going on all year, and up to four drills are planned to be on site at the Bald Mountain Mine when the weather clears. Companies are having a difficult time finding available drilling rigs (Platts Metals Week, 2004d).

International.—A new European bank sales agreement was signed that could allow more gold to reach the marketplace. The pact, effective September 2004, allows the 14 participating European central banks and the European Central Bank to sell 500,000 kg (16 million troy ounces) of gold per year, up from 400,000 kg (12.9 million ounces) per year authorized in the previous agreement signed in 1999. The increase is in line with the predicted gold sales that are capped at 2.5 million kg (over 80 million ounces) of gold over 5 years of the agreement. Only Germany's Bundesbank, however, the world's second-largest holder of gold, planned to increase its gold sales (American Metal Market, 2004a).

South Africa, the world's largest gold producer, had a gold output of 375,800 kg (12 million ounces) in 2003, which was 4.9% lower than the gold output in 2002. The fall in South African gold production in 2003 was the industry's response to the strong rand exchange rate and consequent decline in the rand gold price, and to higher South African gold production costs.

The annual average 2003 gold price in U.S. dollars increased to \$363.65 per troy ounce (up by 17.3% compared with that of 2002), but the rand-to-dollar exchange rate appreciated 28.1% over the same period, which negated the gains made in the dollar gold price (Platts Metals Week, 2004g).

The London Bullion Market Association (LBMA) report of gold ounces transferred rose 9% in February in comparison with those of January, rising to 479,000 kg (15.4 million ounces). In comparison with those of February 2003, ounces transferred were 19% lower. The number of gold transfers rose 3% in February in comparison with those of January, and the number of gold transfers decreased 20% over the number of transfers in comparison with those of February 2003 (Platts Metals Week, 2003e).

Australia's gold output increased 5% to 290,000 kg (9.3 million ounces) in 2003. Australia has overtaken the United States as the world's second largest gold producer, and has established an upward trend owing to the creation of more new and recycled gold projects that are coming into production (Platts Metals Week, 2003a).

MMC Norilsk Nickel (Russia) purchased Anglo American Plc's (United Kingdom) 20% share in Gold Fields Ltd. (South Africa). The purchase was the largest foreign investment made by a Russian company. It makes Moscow-based Norilsk the world's sixth largest gold producer. Gold Fields, with more than 134,000 kg (4.3 million ounces) of annual gold production, is the world's fourth largest gold producer. The Johannesburgbased company operates in South Africa, Ghana, and Australia

and is conducting exploration in Africa, Australia, Europe, North America, and South America. Anglo American, based in London, will use the money to pay down debt and finance capital expenditure in South Africa (American Metal Market, 2004b).

The Rosebel gold mine in Suriname began commercial production with its first gold pour in early March 2004. Annual gold production is estimated at 7,600 kg (245,000 ounces) at a mine operating cost of \$184 per ounce (Platts Metals Week, 2003b).

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 $\label{table 1} \textbf{TABLE 1}$ MINE PRODUCTION OF RECOVERABLE GOLD IN THE UNITED STATES, BY STATE

(Kilograms)

			Other	
	California	Nevada	States ²	Total
2003: ^p				
March	445	17,800	3,910 ^r	22,100 °
April	425	15,800	3,810 ^r	20,100
May	396	17,700	3,610 ^r	21,700 °
June	381	21,200	4,080 ^r	25,700
July	301	20,600	3,730 °	24,700
August	306	19,200	3,950 ^r	23,500
September	341	20,400 r	4,000 ^r	24,700 °
October	211 ^r	20,300	4,120 ^r	24,600
November	246 ^r	18,900	3,830 ^r	23,000 ^r
December	235 ^r	17,100 ^r	3,910 ^r	21,300 °
January-December	4,270 ^r	226,000	45,700 °	276,000
2004:				
January	229	16,400 ^r	3,140	19,700 °
February	274	15,200 ^r	2,820	18,300 °
March	274	18,100	3,010	21,400
January-March	776	49,700	8,980	59,500

^pPreliminary. ^rRevised.

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

²Includes Alaska, Arizona, Colorado, Idaho, Montana, South Dakota, Utah, and Washington.

TABLE 2 GOLD PRICES

(Dollars per troy ounce)

Engelhard Industries:	
2003:	_
Low/date	321.09 April 7
High/date	417.76 December 31
Average	364.8
2004:	
January:	
Low/date	401.08/30
High/date	426.87/13
Average	415.07
February:	
Low/date	394.57/26
High/date	417.36/13
Average	405.86
March:	
Low/date	391.81/3
High/date	425.07/31
Average	408.01
Year to date:	
Low/date	391.81 March 3
High/date	426.87 January 13
Average	409.64
Handy and Harman:	
2003, average	363.51
2004:	
January	414.09
February	404.52
March	405.99
Year to date	408.20
London Final:	
2003, average	363.51
2004:	
January	413.79
February	404.88
March	406.67
Year to date	408.44

Source: Platts Metals Week.

$\label{eq:table 3} \text{U.S. IMPORTS AND EXPORTS OF GOLD}^{\text{I}}$

(Kilograms of gold content, unless otherwise specified)

Period and country	Ores and concentrates ²	Doré and precipitates	Refined bullion ³	Total ⁴	Waste and scrap (gross weight)	Metal powder (gross weight)	Gold compounds (gross weight)
Imports for consumption:	concentrates	precipitates	bullion	Total	(gross weight)	(gross weight)	(gross weight)
2003:							
December December	3	11,400	10,100	21,600	1,240	336	1,210
Year	1,960	95,200	152,000	249,000	15,000	4,080	31,800
2004:	1,500	93,200	132,000	249,000	13,000	4,080	31,800
January	150	7,980	18,000	26,100	974	327	2,010
February:	130	7,700	10,000	20,100	7/14	321	2,010
Aruba			141	141			
Brazil			2,130	2,130			
Canada	38		10,600	10,600	199	317	
Chile			425	425		317	
Colombia		4,100	346	4,440	22		
Dominican Republic			4	4,440	856	308 5	
Honduras		452	4 	452	12	278	
Mexico		205	 67	452 271	218	218	
		308		308	216		
Nicaragua		115					
Panama			17	132	73		
Peru		8,210	1 150	8,210			752
United Kingdom			1,150	1,150			753 ⁵
Venezuela			257	257			
Other		43	97	140	37	19 5	26 5
Total	38	13,400	15,200	28,700	1,420	922	779
Year to date	188	21,400	33,200	54,800	2,390	1,250	2,790
Exports:							
2003:	144	0.520	1.1.200	22 000	14.200	10	65.200
December	144	9,530	14,200	23,800	14,200	12	65,300
Year	826	131,000	220,000	352,000	159,000	874	565,000
2004:	<i>c</i> 7	10.000	11.500	25 400	20,000	7.6	71 100
January	67	10,800	14,500	25,400	28,000	76	71,100
February:						22	
Armenia						22	260
Australia						1	360
Canada	1		21	23	8,110	1	43,500 5
China						5	16.200
Dominican Republic	74		(6)	74		5	16,300
Germany					637	(6) 5	
Hong Kong			2	2	(6)	2	977
Israel							5,230 5
Japan					39	2	184
Malaysia			43	43			342 5
Mexico	13		1,330	1,340			
Singapore							25,000
Switzerland		9,440	995	10,400	1,100		180 5
Trinidad and Tobago			6	6			
United Kingdom		52	6,500	6,550	40,600	13	979
Other	2		175	177	507		120 5
Total	90	9,490	9,070	18,600	51,000	45	93,600
Year to date	157	20,300	23,600	44,100	79,000	121	165,000

^rRevised. -- Zero.

Source: U.S. Census Bureau.

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

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

³Bullion 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."

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

⁶Less than 1/2 unit.

TABLE 4
LEADING GOLD-PRODUCING MINES IN THE UNITED STATES IN 2003, IN ORDER OF OUTPUT

Rank	Mine	County and State	Operator	Kilograms
1	Newmont Nevada operations ²	Various counties, NV	Newmont Gold Company	72,700
2	Betze-Post/Goldstrike	Eureka, NV	Barrick Gold Corporation	48,500
3	Cortez	Lander, NV	Placer Dome Inc.	33,100
4	Round Mountain	Nye, NV	Round Mountain Gold Corporation	23,500
5	Meikle/Goldstrike	Elko, NV	Barrick Gold Corporation	17,200
6	Fort Knox ³	Fairbanks, AK	Fairbanks Gold Mining Inc.	12,200
7	Bingham Canyon ⁴	Salt Lake, UT	Kennecott Utah Copper Corp.	9,490
8	Jerritt Canyon	Elko, NV	Independence Mining Company, Inc.	9,400
9	Cresson	Teller, CO	Cripple Creek & Victor Gold Mining Co.	8,830
10	Golden Sunlight	Jefferson, MT	Placer Dome Inc.	7,310
11	Marigold	Humboldt, NV	Glamis Gold Ltd.	4,420
12	Florida Canyon	Pershing, NV	Florida Canyon Mining, Inc.	3,170
13	Greens Creek	Juneau, AK	Kennecott Greens Creek Mining Co.	3,090
14	Getchell/Turquoise Ridge	Humboldt, NV	Placer Dome Inc.	2,890
15	Bald Mountain	White Pine, NV	do.	2,820
16	Wharf	Lawrence, SD	Wharf Resources, Ltd.	2,200
17	Denton-Rawhide	Mineral, NV	Kennecott Rawhide Mining Co.	2,010
18	Rochester	Pershing, NV	Coeur d'Alene Mines Corp.	1,630
19	Briggs	Inyo, CA	Canyon Resources Corp.	1,140
20	Barney's Canyon	Salt Lake, UT	Kennecott Barney's Canyon Mining Co.	1,090
21	Rand	Kern, CA	Glamis Rand Mining Co.	1,050
22	Castle Mountain	San Bernardino, CA	Viceroy Resources Corporation	440
23	Illinois Creek ^{e,5}	Yukon-Koyukuk, AK	American Reclamation Group LLC	428
24	Beartrack	Lemhi, ID	Meridian Gold Inc.	126
XX	Homestake	Lawrence, SD	Homestake Mining Company	(6)
XX	McCoy/Cove	Lander, NV	Newmont Gold Company	(6)
XX	Mesquite	Imperial, CA	do.	(6)
XX	Midas	Elko, NV	Euro-Nevada Mining Co.	(6)
XX	Montana Tunnels	Jefferson, MT	Montana Tunnels Mining, Inc.	(6)
XX	Ruby Hill	Eureka, NV	Homestake Mining Company	(6)
-				

^eEstimated. XX Not applicable.

Sources: Company annual reports, Securities and Exchange Commission's 10-K reports, and company news releases.

¹Data are rounded to no more than three significant digits; these mines accounted for more than 99% of the U.S. gold production through the fourth quarter of 2003.

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

³Mine production refers to gold equivalent produced.

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

⁵Source: Alaska's Mineral Industry 2003: A Summary.

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