

# Mineral Industry Surveys

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#### **GOLD IN FEBRUARY 2011**

U.S. mines produced 15,300 kilograms (kg) of gold in February, an 8% decrease compared with January production, according to the U.S. Geological Survey. The average daily gold production for U.S. mines was 548 kg in February, compared with 539 kilograms per day (kg/d) for January, and 642 kg/d for the full year of 2010.

The average Engelhard gold price was \$1,374.11 per troy ounce for February, a slight increase compared with the average gold price in January. The gold price began the month at \$1,334.41 per troy ounce, the lowest level of the month, and then rose throughout the month to \$1,414.55 per troy ounce on February 24, the highest level of the month. The price fell slightly and ended the month at \$1,414.50 per troy ounce.

On February 3, Newmont Mining Corp. (Denver, CO) announced that it entered into an agreement to acquire Fronteer Gold Inc. (Vancouver, British Columbia, Canada). Fronteer owned the Long Canyon project, which is approximately 160 kilometers east of Newmont's existing operations in Nevada. The project has estimated measured and indicated resources of 44 metric tons (t) of gold and additional inferred resources of 25 t of gold. Fronteer also owned 100% of the Northumberland project and a joint venture interest with Newmont in the Sandman project, both in Nevada. According to the agreement, a new company would be spun off to control a portion of the exploration projects. Pilot Gold, the new company, would own 11 properties in Nevada (excluding Long Canyon, Northumberland, and Sandman), 2 in Turkey, and 1 in Peru. Fronteer shareholders would own 80.1% of Pilot Gold, with Newmont holding the remaining 19.9% (Newmont Mining Corp., 2011).

A preliminary assessment report based on concept, prefeasibility, and feasibility-level study programs was completed for the Pebble copper-gold-molybdenum project in southwest Alaska. The report had three potential mining scenarios [25, 45, and 78 years of open pit mining, with a nominal processing rate of 200,000 metric tons of ore per day (t/d)]. The 25-year case was the investment decision case that the company was expected to use to decide whether to initiate mine permitting, construction, and operation. The 45-year reference case was the base case and would produce 14 million

metric tons (Mt) of copper, 933 t of gold, 635,000 t of molybdenum, 28 t of palladium, 1,200 t of rhenium, and 4,350 t of silver while mining only 32% of the mineral resources at an average cost of \$0.11 per pound of copper. The resource case, which was based on the 78-year mine life, assessed the long-term value of the project. The project was a joint venture between Anglo American plc (London, United Kingdom) and Northern Dynasty Minerals Ltd. (Vancouver), and a new prefeasibility study was expected to be completed in 2012, with production by the end of 2016 (Northern Dynasty Minerals Ltd., 2011, p. 1–5).

Great Basin Gold Ltd. (Vancouver) updated the reserve estimates for the Hollister Mine in NV. The new proven and probable reserves were 1.05 Mt of ore, at an average grade of 27.2 gram per metric ton (g/t) gold and 163 g/t silver, resulting in 26 t of contained gold and 155 t of contained silver. Great Basin Gold forecast an annual average production of 3,400 kg of gold equivalent for the next 8 years from the mine (Great Basin Gold Ltd., 2011).

Romarco Minerals Inc. (Toronto, Ontario, Canada) announced results from a feasibility study for the Haile gold mine in South Carolina. The mine was expected to have a 13-year mine life and has a proven and probable reserves of 30.5 Mt of ore at a grade of 2.06 g/t gold, resulting in 63 t of contained gold. The project was designed to meet the International Cyanide Management Code standards, and the company planned to have the funds and permits for construction in place by the end of 2011 (Romarco Minerals Inc., 2011).

Fire River Gold Corp. (Vancouver) announced the results of a preliminary economic assessment (PEA) evaluating the resumption of underground mining at the Nixon Fork gold mine in Alaska. According to the PEA, the current resource was sufficient to sustain a 2-year production forecast rate of 150 t/d, with an average mine grade of 30.1 g/t gold. The company planned to restart the mine in the summer of 2011 (Fire River Gold Corp., 2011).

Klondex Mines Ltd. (Vancouver) received the water pollution control permit for its underground Fire Creek gold deposit in Lander County, NV. The permit authorizing the construction and operation of approved mining facilities was issued by the

Nevada Division of Environmental Protection. The estimated indicated resources for the project were 51 t of gold equivalent, with additional inferred resources of 16 t of gold equivalent. The resource was approximately 98.3% gold and 1.7% silver (Klondex Mines Ltd., 2011).

The first Fairtrade and Fairmined certified gold went on sale on February 14. Two mining co-ops in Bolivia and Peru were certified by Fairtrade Foundation and Alliance for Responsible Mining (ARM) as complying with a set of gold-producing standards. The initiative was designed to certify gold produced by small-scale miners, from production at the mine through the supply chain to the retailer, as fairly mined and fairly traded. Miners who produced Fairtrade gold received a minimum price for their gold and adhered to standards that included the commitment to using safe and reliable practices in the production of gold (minimal use of chemicals such as mercury and cyanide), compliance with the national legal framework, gender equality, environmental stewardship, and the elimination of child labor. Some analysts estimated that there were 15 million artisanal miners around the world producing an average 300 t of gold per year or about 10% of the global supply (Mining Journal, 2011).

#### **References Cited**

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- Klondex Mines Ltd., 2011, Klondex receives Nevada state approval for Fire Creek high-grade gold underground program: Vancouver, British Columbia, Canada, Klondex Mines Ltd. press release, February 3, 5 p.
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 $\label{table 1} \textbf{MINE PRODUCTION OF RECOVERABLE GOLD IN THE UNITED} \\ \textbf{STATES, BY STATE}^1$ 

## (Kilograms)

		Other				
	Nevada	States <sup>2</sup>	Total			
2010: <sup>p</sup>						
February	12,700	4,430	17,100			
March	14,600	5,450	20,100			
April	12,400	5,790	18,200			
May	12,700	5,210	17,900			
June	16,000	5,120	21,200			
July	15,100	5,970	21,100			
August	15,400	5,380	20,800			
September	16,200	5,180	21,400			
October <sup>r</sup>	15,000	4,610	19,600			
November <sup>r</sup>	15,400	5,210	20,600			
December <sup>r</sup>	11,600	5,440	17,100			
January-December <sup>r</sup>	170,000	63,900	234,000			
2011:						
January	11,400	5,340 <sup>r</sup>	16,700			
February	11,100	4,250	15,300			
January-February	22,500	9,580	32,000			

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>Includes Alaska, Arizona, California, Colorado, Idaho, Montana, New Mexico, South Dakota, Utah, and Washington.

### TABLE 2 GOLD PRICES

(Dollars per troy ounce)

Engelhard:	
2010:	<del></del>
Low/date	1,060.45 Feb. 5
High/date	1,424.07 Nov. 9
Average	1,227.51
2011:	
January:	
Low/date	1,321.89/28
High/date	1,421.56/3
Average	1,362.32
February:	
Low/date	1,330.91/3
High/date	1,414.55/24
Average	1,374.11
Year to date:	
Low/date	1,321.89 Jan. 28
High/date	1,421.56 Jan. 3
Average	1,367.92
Handy and Harman:	
2010, Average	1,224.74
2011:	
January	1,359.39
February	1,371.13
Year to date	1,365.11
London Final:	
2010, Average	1,224.66
2011:	
January	1,356.40
February	1,372.73
Year to date	1,364.56
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Source: Platts Metals Week.

 $\label{eq:table 3} \textbf{U.S. IMPORTS AND EXPORTS OF GOLD}^1$ 

(Kilograms of gold content, unless otherwise specified)

Period and country	Ores and concentrates <sup>2</sup>	Doré and precipitates	Refined bullion <sup>3</sup>	Total <sup>4</sup>	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)
2010:	_						
December	35,900	12,800	37,700	86,300	3,550	315	3
January-December	257,000	148,000	199,000	604,000	46,100	652	43,500
2011, January:		140,000	177,000	004,000	40,100	032	+3,300
Brazil	- -		520	520			
Canada		1 5	5,720	5,720	672 5	8 5	
Chile		130	575	705	18 5		
Colombia	- -	2,010	446	2,460			
Dominican Republic		2,010		2,400	712 5		
Germany			39	39	2 5	12 5	4,180 5
Guyana	-	178	225	403		12	4,100
Honduras	=	208		208	285 5		
Japan							3,420 5
Mexico	34,000 <sup>5</sup>	7,040 5	2,630 5	43,700	426 5	4 5	3,420
Netherlands Antilles		126	424	550	18 5		
Nicaragua		135		135	160 <sup>5</sup>		
Peru		2,250		2,250			
Switzerland		16 <sup>5</sup>	248	264			
Other		138 5	516 <sup>5</sup>	654	1,190 5	4	
Total	34,000	12,200	11,300	57,600	3,480	28	7,590
Exports:	_	,	,	,	2,		.,
2010:	=						
December		5,200	23,100	28,500	25,700	25	375,000
January-December	3,470	84,400	295,000	383,000	660,000	2,330	4,270,000
2011, January:	= <del></del>	· · · · · · · · · · · · · · · · · · ·		,	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Brazil			848	848			
Canada			71 5	71	4,850 5	10 5	62,900 5
China	221			221	,	1 5	
Dominican Republic	4 5			4			15,200 5
France			3 5	3		1	3,310 5
Germany	214		16	230	16,500 5		1,310 5
Hong Kong	- 		13,500	13,500		2 5	394 5
India			995	995		21	
Malaysia							36,500 <sup>5</sup>
Mexico			193 5	451		1 5	47,100 5
Netherlands							16,700 5
Singapore			10	10			144,000 5
Switzerland	_ 	4,820 5	4,340 5	9,160			
Taiwan							3,570 5
Thailand			652	652			1,890 5
Turkey			503	503			
United Kingdom	_ 2 <sup>5</sup>	22 5	11,700	11,700	19,300	20 5	912 5
Other	132		111 5	243	144	1 5	423 5
Total	832	4,840	33,000	38,600	40,800	57	334,000

See footnotes at end of table.

# $\label{eq:continued} \textbf{LS. IMPORTS AND EXPORTS OF GOLD}^1$

Source: U.S. Census Bureau.

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Includes gold content of base metal ores, concentrates, and matte imported for refining.

<sup>&</sup>lt;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.

 $<sup>^{4}\</sup>mbox{"Waste}$  and scrap," "Metal powder," and "Gold compounds" not included in "Total."

<sup>&</sup>lt;sup>5</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.