

# Mineral Industry Surveys

## For information, contact:

Henry E. Hilliard, Silver Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4970  
Fax: (703) 648-7757  
E-mail: [hhilliar@usgs.gov](mailto:hhilliar@usgs.gov)

Mahbood Mahdavi (Data)  
Telephone: (703) 648-7778, Fax: (703) 648-7975  
E-mail: [mmahdavi@usgs.gov](mailto:mmahdavi@usgs.gov)  
Wanda G. Wooten (Data)  
Telephone: (703) 648-4980, Fax: (703) 648-7975  
E-mail: [wwooten@usgs.gov](mailto:wwooten@usgs.gov)

**Internet:** <http://minerals.usgs.gov/minerals>

## SILVER IN SEPTEMBER 2004

U.S. mines produced 110,000 kilograms (kg) of silver in September 2004, according to the U.S. Geological Survey. Compared with that of August, production of silver was up by about 4%. Production was up by about 14% in Nevada and slightly more than 1% in the other silver-producing states.

During the first 9 months of 2004, Hecla Mining Company, Coeur d'Alene, ID, produced 177,300 kg of silver at an average total cash cost of \$1.81 per troy ounce (ounce). Production in the third quarter of 2004 was 52,880 kg at an average total cash cost of \$2.32 per ounce. Total cash costs in the third quarter at Hecla's silver operations were higher than earlier in the year owing to lower ore grades and higher fuel and steel costs. Hecla's Lucky Friday Mine produced more than 46,600 kg of silver in the first 9 months of 2004 at a year-to-date average total cash cost of \$4.98 per ounce. Cash costs at Lucky Friday reportedly were significantly lower in 2004 compared with cash costs for the same period of 2003, partially owing to higher byproduct metal prices. In the first 9 months of 2004, the Greens Creek Mine in Alaska, in which Hecla holds an approximately 30% interest, produced 68,400 kg of silver for Hecla's account at an average total cash cost of \$1.04 per ounce. Hecla's share of Greens Creek's third quarter production was about 23,860 kg of silver at an average total cash cost of \$1.55 per ounce (Hecla Mining Company, 2004).

Coeur d'Alene Mines Corporation, Coeur d'Alene, ID, reported the production of 93,310 kg of silver in the third quarter of 2004 compared with 102,600 kg in the third quarter of 2003. Coeur's silver production in the first 9 months of 2004 totaled 304,800 kg compared with 332,800 kg in the same

period of 2003. Coeur expected full-year 2004 production to be about 420,000 kg. The production rate at Coeur's Rochester Mine following commissioning of a new crushing plant did not recover to Coeur's projected level during the third quarter but was expected to increase in the fourth quarter. Rochester produced 40,400 kg of silver in the third quarter of 2004 at a total cash cost of \$4.23 per ounce. Rochester produced 124,400 kg of silver in the first 9 months of 2004, and full-year production was expected to reach 171,000 kg (Coeur d'Alene Mines Corporation, 2004).

China's Ministry of Commerce recently issued its second batch of export quotas for silver totaling 859 metric tons (t). Combined with the 2,191 t issued earlier in 2004, the total export quota for silver in 2004 reached 3,050 t. During the period January through July of 2004, China imported 7,200 kg of silver concentrate and 76,800 kg of silver powder (Antaike Precious & Minor Metals Monitor, 2004).

## References Cited

- Antaike Precious & Precious Metals Monitor, 2004, MOC issues second batch of export quota[s] for silver: Antaike Precious & Minor Metals Monitor, no. 55, September, p. 7.
- Coeur d'Alene Mines Corporation, 2004, Coeur reports third quarter results: Coeur d'Alene, ID, Coeur d'Alene Mines Corporation press release, November 8, p. 14.
- Hecla Mining Company, 2004, Hecla releases third quarter financial results, advances exploration and development projects; for the period ended September 30, 2004: Coeur d'Alene, ID, Hecla Mining Company news release, November 4, p. 3.

TABLE 1  
MINE PRODUCTION OF RECOVERABLE SILVER  
IN THE UNITED STATES, BY STATE<sup>1</sup>

(Kilograms)

	Nevada	Other States <sup>2</sup>	Total
<u>2003:<sup>P</sup></u>			
September	31,900	73,700	106,000
October	27,700	77,600	105,000
November	30,600	75,400	106,000
December	28,300	81,200	109,000
January-December	322,000	914,000	1,240,000
<u>2004:</u>			
January	24,400	90,900	115,000
February	22,600	67,000	89,600
March	24,500	72,300	96,800
April	23,200	72,000	95,200
May	25,700	73,500 <sup>r</sup>	99,100
June	26,200	80,500 <sup>r</sup>	107,000 <sup>r</sup>
July	22,800	84,500 <sup>r</sup>	107,000
August	23,900	81,700 <sup>r</sup>	106,000 <sup>r</sup>
September	27,200	82,900	110,000
January-September	220,000	705,000	926,000

<sup>P</sup>Preliminary.

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

<sup>2</sup>Includes Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, Utah, and Washington.

TABLE 2  
SILVER PRICES

(Dollars per troy ounce)

Engelhard Industries:	
2003:	
Low/date	4.39 March 24
High/date	5.98 December 31
Average	4.91
2004:	
July:	
Low/date	5.91/1
High/date	6.77/16
Average	6.39
August:	
Low/date	6.54/12
High/date	6.97/20
Average	6.72
September:	
Low/date	6.16/9
High/date	6.93/30
Average	6.43
Year to date:	
Low/date	5.60 May 13
High/date	8.23 April 7
Average	6.55
Handy and Harman:	
2003, Average	4.91
2004:	
July	6.38
August	6.71
September	6.42
Year to date	6.54
London Final: <sup>1</sup>	
2003, Average	4.88
2004:	
July	6.31
August	6.66
September	6.39
Year to date	6.50

<sup>1</sup>Reported as "London Spot/US Equiv."

Source: Platts Metals Week.

TABLE 3  
U.S. IMPORTS OF SILVER, BY COUNTRY<sup>1</sup>

Period and country	Bullion		Doré		Ores and concentrates <sup>2</sup>		Ash and residues		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2003	4,000,000	\$630,000	233,000	\$72,200	2,540	\$1,370	1,340	\$266	4,240,000	\$703,000
2004:										
June	263,000	50,800	26,100	7,800	--	--	372	86	289,000	58,700
July	222,000	44,400	31,700	10,300	1,120	987	563	132	256,000	55,800
August:										
Canada	121,000 <sup>3</sup>	27,800	376	60	307 <sup>3</sup>	260	--	--	121,000	28,100
Colombia	79	17	--	--	--	--	--	--	79	17
Italy	5 <sup>3</sup>	3	--	--	--	--	--	--	5	3
Mexico	159,000	33,800	17,800 <sup>3</sup>	6,150	--	--	--	--	177,000	39,900
Peru	21,300	4,270	6,460	1,540	--	--	--	--	27,800	5,810
Taiwan	--	--	--	--	--	--	415	100	415	100
Total	301,000	65,800	24,700	7,750	307	260	415	100	326,000	73,900
Year to date	2,270,000	475,000	213,000	72,500	2,220	1,410	4,550	1,030	2,490,000	550,000

-- Zero.

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

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

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

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Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS OF SILVER, BY COUNTRY<sup>1</sup>

Period and country	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms <sup>2</sup> (gross weight)		Waste and scrap (gross weight)	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2003	281,000	\$42,200	20,800	\$4,160	661	\$96	17,000	\$2,700	886,000	\$107,000
2004:										
June	16,100	3,070	2,030	495	--	--	3,720	713	70,900	13,500
July	59,200	12,100	820	191	251	37	5,560	1,280	68,100	12,800
August:										
Brazil	--	--	--	--	--	--	4,130	988	--	--
Canada	1,490 <sup>3</sup>	423	409	65	--	--	--	--	5,480	2,070
China	--	--	--	--	--	--	--	--	25	39
Colombia	--	--	--	--	--	--	--	--	(4)	6
Costa Rica	--	--	--	--	--	--	--	--	10,600	673
Dominican Republic	--	--	--	--	--	--	--	--	27	154
France	1 <sup>3</sup>	5	(4) <sup>3</sup>	3	--	--	--	--	--	--
Germany	33 <sup>3</sup>	11	393 <sup>3</sup>	95	--	--	1,850	437	542	1,160
Guatemala	--	--	--	--	--	--	--	--	1	10
Hungary	--	--	--	--	--	--	--	--	5	3
India	18	3	--	--	--	--	--	--	--	--
Ireland	--	--	--	--	--	--	--	--	51	145
Israel	--	--	2 <sup>3</sup>	3	--	--	--	--	--	--
Italy	--	--	--	--	--	--	--	--	28	501
Jamaica	--	--	--	--	--	--	--	--	249	50
Japan	--	--	--	--	--	--	--	--	6	118
Mauritius	--	--	--	--	--	--	--	--	52	12
Mexico	42,400	9,030	--	--	--	--	--	--	165,000	6,990
Norway	--	--	14	2	--	--	--	--	--	--
Panama	--	--	--	--	--	--	--	--	76	419
Philippines	--	--	--	--	--	--	--	--	2	24
Singapore	--	--	--	--	--	--	--	--	5	102
Switzerland	--	--	150	36	--	--	50	13	--	--
Taiwan	--	--	--	--	--	--	--	--	25	27
United Kingdom	--	--	220 <sup>3</sup>	44	--	--	(4) <sup>3</sup>	8	62,300	580
Venezuela	--	--	--	--	--	--	--	--	100	1,020
Total	43,900	9,470	1,190	249	--	--	6,030	1,450	245,000	14,100
Year to date	211,000	42,200	16,500	4,070	278	49	31,400	7,200	700,000	89,900

-- 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.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

<sup>4</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF SILVER<sup>1</sup>

Period and country	Bullion		Doré		Ores and concentrates <sup>2</sup>		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2003	135,000	\$20,700	19,800	\$3,200	57,900	\$16,200	212,000	\$40,300
2004:								
June	50,900	11,600	12,500	2,550	379	57	63,800	14,200
July	3,970	921	6,190	1,990	107	23	10,300	2,930
August:								
Belgium	--	--	335	47	--	--	335	47
Canada	57,000	14,100	--	--	--	--	57,000	14,100
Dominican Republic	--	--	--	--	122	29	122	29
France	--	--	27	8	--	--	27	8
Mexico	1,140	205	207	51	--	--	1,350	256
Norway	--	--	117	26	--	--	117	26
Singapore	--	--	501	109	--	--	501	109
Switzerland	--	--	7,970	1,730	--	--	7,970	1,730
Trinidad and Tobago	--	--	--	--	40	7	40	7
United Kingdom	--	--	102	21	--	--	102	21
Total	58,100	14,300	9,260	1,990	162	36	67,500	16,300
Year to date	218,000	48,000	47,100	10,500	1,060	199	266,000	58,700

-- Zero.

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

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

Source: U.S. Census Bureau.

TABLE 6  
U.S. EXPORTS OF SILVER<sup>1</sup>

Period and country	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semimanufactured forms <sup>2</sup> (gross weight)		Waste and scrap (gross weight)	
	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)	Quantity (kilograms)	Value (thousands)
2003	26,000	\$5,470	473,000	\$81,500	69,200	\$9,120	344,000	\$59,400	2,020,000	\$410,000
2004:										
June	2,030	384	61,800	10,700	9,170	908	16,900	3,020	160,000	33,700
July	1,710	369	51,600	8,940	3,620	357	30,000	5,540	145,000	28,900
August:										
Aruba	--	--	--	--	--	--	118	20	2	10
Belgium	--	--	270	46	--	--	221	38	2,540	2,260
Canada	1,110	246	1,120	203	2,290 <sup>3</sup>	68	5,960	1,030	56,700	8,460
China	--	--	63	11	--	--	35	6	33,200	5,610
Czech Republic	--	--	103	17	--	--	--	--	--	--
Dominican Republic	160	35	--	--	--	--	--	--	--	--
France	--	--	3,590	611	--	--	584	103	--	--
Germany	--	--	6,100	1,040	30	9	497	87	20,600	4,740
Hong Kong	10 <sup>3</sup>	9	9,040	1,540	--	--	710	121	1,190	155
Ireland	--	--	93	16	--	--	--	--	--	--
Israel	--	--	--	--	--	--	163	28	--	--
Italy	13	3	--	--	--	--	97	16	39,100	4,740
Japan	--	--	9,590	1,640	--	--	1,390	236	259	2,640
Korea, Republic of	59	10	9,060	1,660	--	--	--	--	1,120	146
Mexico	--	--	2,340	398	1,160 <sup>3</sup>	66	833	217	--	--
Netherlands	--	--	210	36	--	--	2,100	362	196	144
Norway	--	--	--	--	--	--	497	84	--	--
Philippines	--	--	--	--	--	--	115	20	--	--
Poland	--	--	--	--	--	--	604	103	--	--
Saudi Arabia	--	--	--	--	--	--	--	--	7,210	2,330
Singapore	22	4	496	84	--	--	501	93	266	35
South Africa	--	--	--	--	25	4	--	--	--	--
Spain	--	--	--	--	--	--	1,590	270	--	--
Sri Lanka	--	--	--	--	565	167	--	--	--	--
Sweden	--	--	--	--	--	--	--	--	4,970	645
Taiwan	--	--	3,840	655	10	3	740	135	611	119
United Kingdom	--	--	6,090	1,040	--	--	844	149	5,660	1,080
Vietnam	236	46	--	--	--	--	--	--	--	--
Other	207 <sup>3</sup>	203	146	25	177 <sup>3</sup>	12	224	38	78	15
Total	1,820	395	52,200	9,020	4,250	329	17,800	3,150	174,000	33,100
Year to date	23,800	5,170	461,000	79,700	41,900	4,300	154,000	27,300	1,400,000	273,000

-- 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.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.