

Selected Statistics for Silver Production — 1986

The following figures on silver production are taken from reports of the U.S. Bureau of Mines and mining companies. All production figures are given in millions of ounces.

COUNTRIES WITH OVER 10 MILLION OUNCES OF SILVER PRODUCTION ANNUALLY

Country	1981	1982	1983	1984	1985
Mexico	53.0	59.1	63.6	75.3	69.0
Peru	46.9	53.5	55.9	56.5	60.4
U.S.S.R. (est)	46.5	46.9	47.2	47.4	47.9
U.S.	40.6	40.2	43.4	44.6	39.4
Canada	36.3	42.3	35.6	42.7	38.9
Australia	24.0	29.2	33.2	31.2	35.0
Poland	20.6	21.1	21.8	23.9	24.0
Chile	11.6	12.3	15.1	15.8	16.6
Japan	9.0	9.8	9.9	10.4	10.9
Total world†	361.6	382.9	392.1	415.2	412.2

†Includes above and other countries.

PRODUCTION BY MINE¹

Mines (United States) ²	1984	1985
1. Lucky Friday (ID) Hecla	4.8	4.7
2. Sunshine (ID) Sunshine	4.8	4.7
3. Galena (ID) Asarco, Callahan	4.2	4.1
4. Troy (MT) Asarco	4.3	3.6
5. Coeur (ID) Asarco, CDA mines	2.5	2.6
6. Candelaria (NV) Nerco	2.7	2.5
7. Escalante (UT) Hecla	2.2	2.4
8. Delamar (ID) Nerco	1.7	1.5
9. Bingham (UT) *Kennecott	N.A.	N.A.
10. Black Pine (MT) Inspiration	1.4	closed
11. Bulldog (CO) Homestake	1.3	closed
12. Taylor (NV) Silver King Mines, Nerco	closed	closed

Mines (Foreign)	1984	1985
1. Mount Isa (Australia) ^{*3}	17.8	18.0
2. MEDIMSA (Mexico) ⁴	21.2	22.9
3. Fresnillo+ Zimapan (Mexico) ⁵	10.3	10.3
4. Real de Angeles (Mexico) ⁶	9.0	11.1
5. Noranda (Canada) ⁷	4.5	3.3
6. Equity Silver (Canada) ⁸	4.6	4.6
7. Brunswick No. 2 (Nova Scotia) [*]	6.6	5.7
8. Kidd Creek (Canada) ^{*9}	8.7	7.8
9. Black Mountain (South Africa) ^{*10}	3.8	4.0
10. Elura (Australia) ¹¹	2.5	3.4
11. Torres Complex (Mexico) ¹²	4.2	3.8
12. Bueno Ventura (Peru) ¹³	6.6	8.5
13. Centromin/Casapalca unit (Peru) ^{*14}	4.0	4.5
14. Centromin/Cerro de Pasco unit (Peru) ¹⁵	4.3	4.3
15. Sullivan (Canada) ¹⁶	4.6	3.6
16. Arcata (Peru) ¹⁷	3.3	3.5

*Base metal or copper mines. Silver by-product.
N.A. Not Available.

FOOTNOTES

- The richest silver-producing districts in the world are as follows: Coeur d'Alene district, Idaho, USA, over 1 billion ounces recorded production since 1884; Pachuca-Real del Monte, Mexico, estimated 1.2 billion ounces since 1500s; Guanajuato, Mexico, over one billion ounces; Potosi, Bolivia, 965 million ounces. Two districts in Mexico, Taxco and Zacatecas, produced large amounts of silver, but total production is unknown. The fabled Comstock lode in Nevada produced approximately 200 million ounces of silver. Ore grades vary among the world's leading mines: 25-30 ounces-per-ton in the Coeur d'Alene mines; 1.5 ounces-per-ton at Troy; 2-3 ounces-per-ton at Equity Silver; 2 ounces-per-ton at Real de Angeles; 4-5 ounces-per-ton at Mt. Isa; and 1.5-2 ounces-per-ton at the Sullivan mine.
- The Lucky Friday, Sunshine, Galena, and Coeur mines are all located in the Coeur d'Alene district, Idaho. In February 1985, after only 100 years of mining, this district had produced over 1 billion ounces of silver. Most of the mines in the district are over one mile deep. The Sunshine mine has produced over 300 million ounces of silver and is probably the most productive silver mine in the world (see *GeoNote 7* for more information). The Candelaria mine is the largest open-pit silver mine in the United States.
- Owned 44% by Asarco.
- MEDIMSA (Mexico Desarrollo Industrial Minero, S.A.) operates 11 mines including the San Martin, Taxco, Santa Barbara (largest underground mine in Mexico), Santa Eulalia, Velardena, and Charcas mines. Silver production shown is for all 11 properties, some of which are base metal mines. Asarco owns 34% of MEDIMSA.
- The Fresnillo mine produced over 200 million ounces of silver from 1570 to 1980. Joint venture between PENOLES (60%) and AMAX (40%). The PENOLES Group is the largest producer of silver in Mexico.
- Real de Angeles is owned by Fomento Minero, Frisco S.A., and Placer Development Ltd. (34%). It is the largest open-pit silver mine in the world.
- Production in 1984 from Geco unit (1.4 million oz.), Lyon Lake unit (2.0 million oz.), and Mattabi unit (1.2 million oz.).
- A subsidiary of Placer Development, Ltd.
- Owned by Falconbridge (1985).
- Owned by Black Mountain, Consolidated Goldfields, and Phelps Dodge.
- Owned by North Broken Hill Holdings, Ltd. (first year of production in FY-84).
- The Torres Complex at Guanajuato contains four major mines owned by Cia Minera Fresnillo S.A. Lacana owns 30% of the complex.
- Bueno Ventura-Peru's second largest silver producer after Centromin and the largest privately owned producer. Mines include Julcani, Uchucchacua, and Orcopampa.
- Centromin (government mining company) operates the Cerro de Pasco mine (underground and open-pit). Ore is processed at the Paragsha and San Expedito concentrators.

- Centromin operates Casapalca, a base metal mine that produces over 4.0 million ounces of silver annually. Centromin also obtains silver from other base metal mines including Morococha, San Cristobel, Yauricocha, and Cobriza.
- Cominco Ltd. mine at Kimberley, B.C., Canada.
- Held by Anglo American Corp. (50%), de Beers South Africa (25%), and Minorco Bermuda (25%).

MAJOR SILVER-PRODUCING STATES

State	1983	1984	1985	Mines
Arizona	4.5	4.0	4.9	Morenci, Sierrita, Eisenhower, San Manuel, Ray, Bagdad, Reymert and other copper mines
Colorado	2.2	2.2	0.5	Bulldog, Leadville mines
Idaho	17.7	18.9	18.8	Sunshine, Lucky Friday, Galena, Coeur, Crescent, Delamar, Clayton Silver
Missouri	2.0	1.4	1.6	Buick, Magmont, Viburnum trend, base metal mines
Montana	5.7	5.7	4.0	Troy, Black Pine
Nevada	5.2	6.5	5.0	Candelaria, Taylor, Sixteen to One, Gooseberry, Battle Mountain
Utah	4.6	w	w	Escalante, Utah Copper (Bingham), Trixie

w = withheld

Source: U.S. Bureau of Mines.

YEAR END STOCKS

	1982	1983	1984	1985
Industry	20.5	17.7	21.2	17.1
Metal Exchanges	106.2	151.2	137.6	173.1
Dept. of Treasury	36.8	34.5	31.9	32.6
Dept. of Defense	1.8	0.1	0.3	0.5
National Stockpile	137.5	137.5	137.5	137.5

Note: In 1984, most silver in the U.S. was consumed for photographic materials (48%) and electronics (25%). Total U.S. industrial consumption—1981, 116.7; 1982, 118.8; 1983, 116.3; 1984, 114.8.

Source: U.S. Bureau of Mines.

U.S. REFINERY PRODUCTION OF SILVER BY RAW MATERIAL

	1982	1983	1984	1985
Concentrates and ores				
Domestic	43.8	50.3	48.9	45.6
Foreign	0.3	0.2	0.1	—
Total	44.1	50.5	49.0	45.6
Old scrap	27.1	25.5	24.0	24.3
New scrap	37.8	41.8	45.5	48.0
Grand Total	109.0	117.8	118.5	117.9

Source: U.S. Bureau of Mines

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