# Mineral Industry Surveys

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## SILVER IN SEPTEMBER 2022

U.S. mines produced 83,900 kilograms (kg) of silver in September 2022 (table 1). Based on unrounded data, the average daily silver production in September was 2,800 kg, essentially unchanged from the revised daily silver production of 2,800 kg in August 2022, and equal to the daily silver production of 2,800 kg for the full year 2021 (fig. 1, table 1).

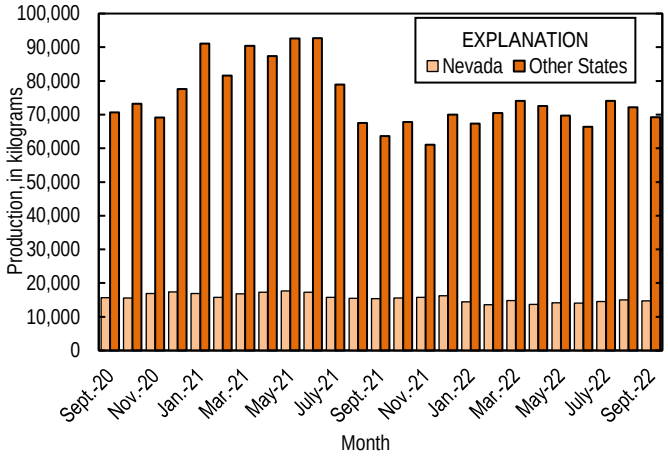


Figure 1. Monthly domestic production of silver in the United States from September 2020 through September 2022.

### Prices

In September 2022, the Engelhard average daily silver price was $19.00 per troy ounce, a 4% decrease from the August 2022 average daily price of $19.78 per troy ounce, a 18% decrease from that in September 2021, and 26% less than that in September 2020. The daily price in September ranged between a high of $19.80 per troy ounce and low of $17.85 per troy ounce which was the lowest price per troy ounce year–to–date (fig. 2, table 2).

### Trade

In September 2022 imports of silver in the form of bullion, dore, and ores and concentrates totaled 340,000 kg, essentially unchanged from that in August 2022. There was a 4% increase in imports of silver bullion from the previous month. Imports of silver bullion increased from Belgium (18,500 kg), Switzerland (14,400 kg), Finland (10,000 kg), and Mexico (8,500 kg), but were partially offset by decreased imports of silver bullion from the Republic of Korea (18,300 kg), Chile (16,100 kg) and Turkey (3,600 kg). Imports of dore decreased by 12% owing to decreased imports from Nicaragua (8,300 kg) and Germany (800 kg). The leading import sources of silver in September 2022 in the form of bullion, dore, and ores and concentrates were: Mexico (177,100 kg), Canada (52,500 kg), Turkey (44,400 kg), Belgium (18,500 kg), Switzerland (15,100 kg), and Chile (14,800) (table 3).

### Exploration

According to S&P Global Inc., in 2022 silver was the third most explored target in the United States with an estimated budget of $106 million. Exploration for silver has increased by 32.6% year-over-year, or an increase of $26.1 million. The growth in silver exploration budgets was unique to the United States with global silver exploration budgets on the decline. The U.S. budget increases can be attributed to large companies such as Hecla Mining Co. and Coeur Mining Inc. who have ramped up minesite drilling activity during the year (DeCoff, 2022).

### Reference Cited

DeCoff, Sean, 2022, CES 2022—Nevada leads US exploration outperformance YOY: S&P Capital IQ Pro Metals and Mining Research, December 5. (Accessed on December 6, 2022, via https://platform.marketintelligence.spglobal.com/.)

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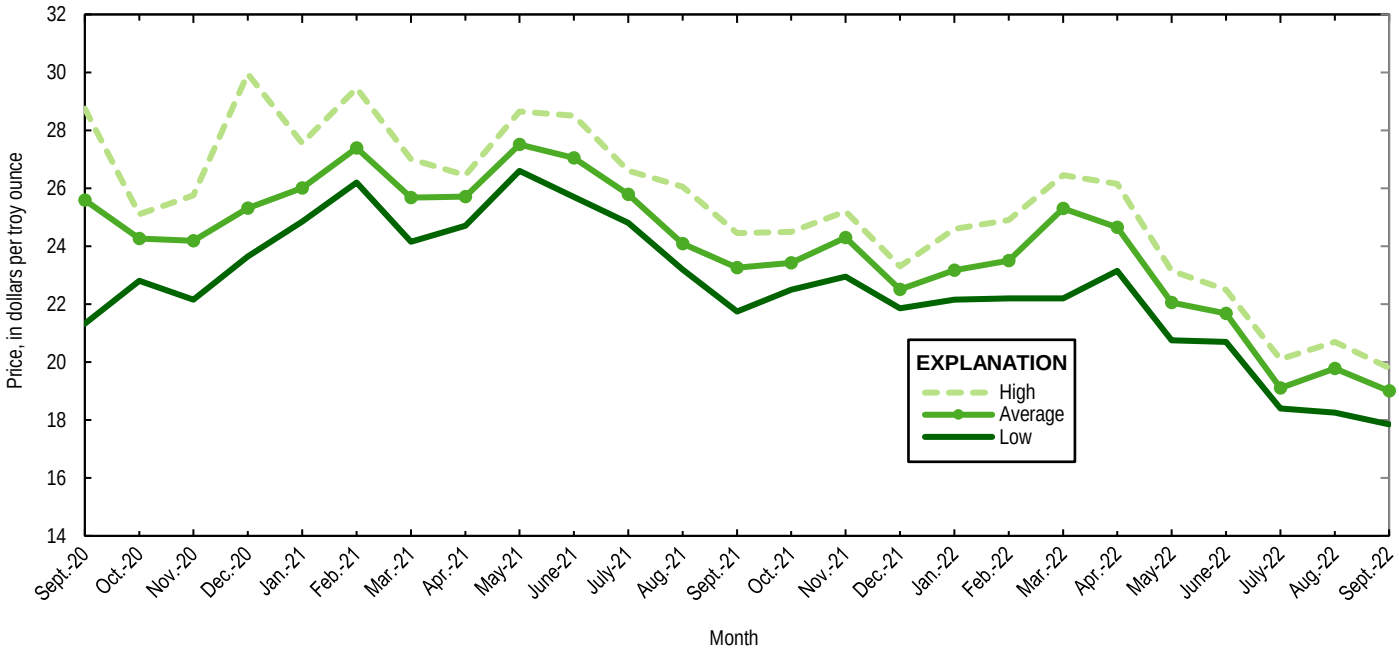


Figure 2. Engelhard monthly silver prices for September 2020 through September 2022. Source: S&P Global Platts Metals Week.

TABLE 1
MINE PRODUCTION OF RECOVERABLE SILVER
IN THE UNITED STATES, BY STATE[1]

(Kilograms)

| | Nevada | Other States[2] | Total |
|---|---|---|---|
| 2021: | | | |
| September | 15,400 | 63,600 | 79,000 |
| October | 15,600 | 67,800 | 83,400 |
| November | 15,800 | 61,100 | 76,900 |
| December | 16,200 | 70,000 | 86,200 |
| January–December | 196,000 | 827,000 | 1,020,000 |
| 2022: | | | |
| January | 14,400 r | 67,300 | 81,700 r |
| February | 13,600 r | 70,500 | 84,100 r |
| March | 14,800 r | 74,100 | 88,900 r |
| April | 13,700 r | 72,600 | 86,300 r |
| May | 14,200 r | 69,700 | 83,900 r |
| June | 14,100 r | 66,400 | 80,500 r |
| July | 14,500 r | 74,100 r | 88,600 r |
| August | 15,000 r | 72,200 r | 87,200 r |
| September | 14,700 | 69,200 | 83,900 |
| January–September | 129,000 | 636,000 | 765,000 |

[r]Revised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, New Mexico, South Carolina, South Dakota, and Utah.

TABLE 2
SILVER PRICES

(Dollars per troy ounce)

| | Price | Date |
|---|---|---|
| Engelhard: | | |
| 2021: | | |
| Low | 21.75 | September 30 |
| High | 29.45 | Feb. 1 |
| Average | 25.23 | XX |
| 2022: | | |
| August | | |
| Low | 18.25 | August 31 |
| High | 20.70 | August 9, 10 |
| Average | 19.78 | XX |
| September | | |
| Low | 17.85 | September 1 |
| High | 19.80 | September 14 |
| Average | 19.00 | XX |
| Year to date | | |
| Low | 17.85 | September 1 |
| High | 26.45 | March 8 |
| Average | 22.03 | XX |
| Handy and Harman: | | |
| 2021, Average | 25.16 | XX |
| 2022: | | |
| August | 19.72 | XX |
| September | 18.94 | XX |
| Year to date | 21.98 | XX |
| London Final:[1] | | |
| 2021, Average | 25.17 | XX |
| 2022: | | |
| August | 19.75 | XX |
| September | 18.84 | XX |
| Year to date | 21.94 | XX |

XX Not applicable.

[1]Reported as “London Spot/US Equiv.”

Source: S&P Global Platts Metals Week.

TABLE 3
U.S. IMPORTS OF SILVER[1]

| Period and country or locality | Bullion | | Dore | | Ores and concentrates[2] Ash and residues | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) |
| 2021 | 5,240,000 | $4,320,000 | 910,000 | $972,000 | 14,800 | $11,400 | 6,160,000 | $5,300,000 |
| 2022: | | | | | | | | |
| July | 335,000 | 217,000 | 48,100 | 48,000 | 1,110 | 641 | 384,000 | 265,000 |
| August | 270,000 | 174,000 | 66,400 | 69,100 | 594 | 381 | 337,000 | 244,000 |
| September: | | | | | | | | |
| Belgium | 18,500 | 11,400 | -- | -- | -- | -- | 18,500 | 11,400 |
| Canada | 51,400 | 31,300 | 614 | 371 | 486 | 299 | 52,500 | 32,000 |
| Chile | 14,800 | 9,730 | 47 | 41 | -- | -- | 14,800 | 9,770 |
| Colombia | 462 | 278 | 11 | 7 | -- | -- | 473 | 285 |
| Finland | 10,000 | 6,270 | -- | -- | -- | -- | 10,000 | 6,270 |
| Germany | 2,110 | 1,450 | -- | -- | -- | -- | 2,110 | 1,450 |
| Italy | -- | -- | 261 | 228 | -- | -- | 261 | 228 |
| Mexico | 121,000 | 72,200 | 55,800 | 56,000 | -- | -- | 177,000 | 128,000 |
| Nicaragua | -- | -- | 1,560 | 1,280 | -- | -- | 1,560 | 1,280 |
| Peru | 1,700 | 1,040 | -- | -- | -- | -- | 1,700 | 1,040 |
| Poland | 1,500 | 941 | -- | -- | -- | -- | 1,500 | 941 |
| Switzerland | 15,100 | 9,740 | -- | -- | -- | -- | 15,100 | 9,740 |
| Turkey | 44,400 | 28,300 | -- | -- | -- | -- | 44,400 | 28,300 |
| Total | 281,000 | 173,000 | 58,300 | 58,000 | 486 | 299 | 340,000 | 231,000 |
| January–September | 2,790,000 | 2,010,000 | 537,000 | 587,000 | 17,200 | 12,000 | 3,340,000 | 2,610,000 |

-- Zero.

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

[2]Includes silver content of base metal ores and concentrates.

Source: U.S. Census Bureau.

TABLE 4

U.S. IMPORTS OF REFINED SILVER[1]

| Period and country or locality | Other unwrought silver (gross weight) | | Metal powder (gross weight) | | Silver nitrate (gross weight) | | Semi manufactured forms[2] (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) |
| 2021 | 397,000 | $289,000 | 196,000 | $49,600 | 2,370 | $316 | 1,200,000 | $998,000 | 6,200,000 | $1,510,000 |
| 2022: | | | | | | | | | | |
| July | 23,000 | 13,900 | 24,200 | 13,800 | 3 | 3 | 215,000 | 159,000 | 477,000 | 90,600 |
| August | 37,700 | 23,200 | 32,600 | 16,100 | 309 | 47 | 76,700 | 51,800 | 551,000 | 103,000 |
| September: | | | | | | | | | | |
| Argentina | -- | -- | -- | -- | -- | -- | -- | -- | 12,600 | 246 |
| Brazil | -- | -- | -- | -- | -- | -- | -- | -- | 3,850 | 791 |
| Canada | 3,030 | 1,880 | 1,010 | 53 | 24 | 14 | 99,200 | 68,500 | 119,000 | 14,300 |
| Ecuador | -- | -- | -- | -- | -- | -- | -- | -- | 1,580 | 28 |
| Germany | 149 | 83 | 253 | 175 | -- | -- | 1,210 | 693 | 14,800 | 6,150 |
| Guatemala | -- | -- | -- | -- | -- | -- | -- | -- | 12,300 | 200 |
| Japan | -- | -- | 3,940 | 781 | 5 | 5 | -- | -- | 69,900 | 19,400 |
| Korea, Republic of | 190 | 16 | -- | -- | -- | -- | 18,000 | 13,600 | 2,170 | 296 |
| Malaysia | -- | -- | -- | -- | -- | -- | -- | -- | 3,930 | 694 |
| Mexico | 32,300 | 19,300 | -- | -- | -- | -- | -- | -- | 47,000 | 6,150 |
| Peru | 2,800 | 1,790 | -- | -- | -- | -- | -- | -- | -- | -- |
| Poland | -- | -- | -- | -- | -- | -- | 5,700 | 3,690 | -- | -- |
| Switzerland | -- | -- | 38,000 | 16,800 | -- | -- | 2,210 | 1,510 | -- | -- |
| Taiwan | -- | -- | -- | -- | -- | -- | 55,700 | 36,500 | 8 | 4 |
| Thailand | (3) | 3 | -- | -- | -- | -- | -- | -- | 3,930 | 800 |
| Turkey | -- | -- | -- | -- | -- | -- | 3,470 | 2,950 | -- | -- |
| United Kingdom | -- | -- | 1 | 2 | 431 | 27 | 150 | 98 | 164,000 | 46,800 |
| Other | 2,210 | 401 | 498 | 109 | 2 | 4 | 39 | 64 | 4,500 | 23,600 |
| Total | 40,600 | 23,500 | 43,700 | 17,900 | 462 | 50 | 186,000 | 128,000 | 459,000 | 119,000 |
| January–September | 337,000 | 229,000 | 255,000 | 149,000 | 2,540 | 348 | 1,510,000 | 1,140,000 | 4,500,000 | 985,000 |

-- Zero.

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

[2]Containing 99.5% or more by weight of silver.

[3]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF SILVER[1]

| Period and country or locality | Bullion | | Dore | | Ores and concentrates[2] Ash and residues | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) |
| 2021 | 111,000 | $99,100 | 25,400 | $22,800 | 515 | $323 | 137,000 | $122,000 |
| 2022: | | | | | | | | |
| July | 19,000 | 13,100 | 175 | 110 | 33 | 22 | 19,200 | 13,200 |
| August | 17,700 | 13,800 | 4,840 | 3,360 | -- | -- | 22,500 | 17,200 |
| September: | | | | | | | | |
| Australia | 187 | 147 | -- | -- | -- | -- | 187 | 147 |
| Canada | 3,380 | 2,820 | -- | -- | -- | -- | 3,380 | 2,820 |
| Chile | 231 | 168 | -- | -- | -- | -- | 231 | 168 |
| Czechia | 123 | 107 | -- | -- | -- | -- | 123 | 107 |
| Denmark | 46 | 32 | -- | -- | -- | -- | 46 | 32 |
| Germany | 5 | 4 | 3 | 3 | -- | -- | 7 | 7 |
| Hong Kong | 9,970 | 6,090 | -- | -- | -- | -- | 9,970 | 6,090 |
| Hungary | 5 | 4 | -- | -- | -- | -- | 5 | 4 |
| India | 44,800 | 31,100 | -- | -- | -- | -- | 44,800 | 31,100 |
| Italy | 1,700 | 1,180 | -- | -- | -- | -- | 1,700 | 1,180 |
| Japan | 16 | 13 | -- | -- | -- | -- | 16 | 13 |
| Macau | 4 | 3 | -- | -- | -- | -- | 4 | 3 |
| Mexico | 466 | 289 | 7 | 5 | -- | -- | 472 | 293 |
| Panama | 21 | 15 | -- | -- | -- | -- | 21 | 15 |
| Poland | 6 | 4 | -- | -- | -- | -- | 6 | 4 |
| Singapore | 8 | 7 | -- | -- | -- | -- | 8 | 7 |
| South Africa | 140 | 104 | -- | -- | -- | -- | 140 | 104 |
| Switzerland | 7 | 5 | -- | -- | -- | -- | 7 | 5 |
| Taiwan | 15 | 12 | -- | -- | -- | -- | 15 | 12 |
| Turkey | 12 | 8 | -- | -- | -- | -- | 12 | 8 |
| United Kingdom | 240 | 166 | -- | -- | -- | -- | 240 | 166 |
| Total | 61,400 | 42,300 | 9 | 8 | -- | -- | 61,400 | 42,300 |
| January–September | 159,000 | 118,000 | 13,500 | 9,990 | 60 | 38 | 173,000 | 128,000 |

-- Zero.

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

[2]Includes silver content of base metal ores and concentrates.

Source: U.S. Census Bureau.

TABLE 6

U.S. EXPORTS OF REFINED SILVER[1]

| Period and country or locality | Other unwrought silver (gross weight) | | Metal powder (gross weight) | | Silver nitrate (gross weight) | | Semi manufactured forms[2] (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) |
| 2021 | 973,000 | $864,000 | 586,000 | $521,000 | 55,100 | $22,400 | 774,000 | $657,000 | 17,300,000 | $4,710,000 |
| 2022: | | | | | | | | | | |
| July | 7,870 | 5,500 | 44,900 | 33,600 | 3,880 | 1,170 | 57,000 | 38,800 | 1,160,000 | 267,000 |
| August | 11,200 | 7,560 | 45,700 | 33,800 | 3,400 | 1,000 | 40,100 | 29,000 | 1,060,000 | 190,000 |
| September: | | | | | | | | | | |
| Belgium | -- | -- | 47 | 32 | -- | -- | 56 | 40 | 86,300 | 5,470 |
| Canada | 5,760 | 3,710 | 2,300 | 1,470 | 775 | 261 | 27,700 | 19,100 | 69,300 | 12,700 |
| China | -- | -- | 2,540 | 1,900 | -- | -- | 1,130 | 889 | 768 | 19 |
| France | -- | -- | 7,790 | 5,220 | -- | -- | 337 | 255 | 23 | 113 |
| Germany | 58 | 37 | 1,330 | 944 | 34 | 6 | 295 | 207 | 254,000 | 52,900 |
| Hong Kong | 54 | 33 | 803 | 649 | -- | -- | 724 | 520 | 1 | 10 |
| India | 1,560 | 977 | 99 | 77 | -- | -- | 616 | 431 | -- | -- |
| Italy | 4 | 3 | 42 | 32 | -- | -- | 125 | 98 | 94,500 | 79,200 |
| Japan | -- | -- | 3,420 | 2,590 | -- | -- | 150 | 89 | 216,000 | 38,600 |
| Korea, Republic of | -- | -- | 3,100 | 2,230 | 170 | 11 | 38 | 33 | 15 | 75 |
| Malaysia | 30 | 26 | 248 | 192 | 3 | 5 | 291 | 234 | 6,560 | 16,500 |
| Mexico | 831 | 500 | 1,090 | 774 | 580 | 60 | 8,510 | 6,180 | -- | -- |
| Netherlands | -- | -- | 1,320 | 1,040 | -- | -- | 53 | 42 | -- | -- |
| Singapore | 25 | 16 | 3,020 | 2,030 | 3,000 | 1,330 | 389 | 280 | -- | -- |
| Sweden | -- | -- | -- | -- | -- | -- | -- | -- | 54,800 | 5,760 |
| Switzerland | 161 | 143 | -- | -- | -- | -- | 384 | 308 | 1,140 | 1,120 |
| Taiwan | -- | -- | 2,530 | 1,770 | -- | -- | 22 | 21 | -- | -- |
| Thailand | 142 | 89 | 10 | 8 | -- | -- | 1,060 | 766 | 7 | 35 |
| United Kingdom | -- | -- | 5,760 | 4,140 | 15 | 5 | 1,150 | 885 | 39,700 | 60,100 |
| Other | 711 | 424 | 568 | 409 | -- | -- | 4,060 | 2,980 | 345 | 101 |
| Total | 9,330 | 5,960 | 36,000 | 25,500 | 4,580 | 1,680 | 47,100 | 33,300 | 823,000 | 273,000 |
| January–September | 141,000 | 125,000 | 437,000 | 343,000 | 42,900 | 16,700 | 474,000 | 371,000 | 10,400,000 | 2,470,000 |

-- Zero.

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

[2]Containing 99.3% or more by weight of silver.

Source: U.S. Census Bureau.