



2022 Minerals Yearbook

GOLD [ADVANCE RELEASE]

U.S. Geological Survey, Reston, Virginia: 2026

For more information on the USGS—the Federal source for science about the Earth, its natural and living resources, natural hazards, and the environment—visit <https://www.usgs.gov> or call 1–888–392–8545.

For an overview of USGS information products, including maps, imagery, and publications, visit <https://store.usgs.gov/> or contact the store at 1–888–275–8747.

Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Although this information product, for the most part, is in the public domain, it also may contain copyrighted materials as noted in the text. Permission to reproduce copyrighted items must be secured from the copyright owner.

GOLD

By Kristin N. Sheaffer

Domestic survey data and tables were prepared by Ashley M. Weatherford, statistical assistant.

In 2022, domestic mine production of gold decreased by 8% to 173,000 kilograms (kg) from 187,000 kg in 2021, and the value of domestic gold production decreased by 8% to \$10.0 billion (tables 1, 2). Nevada and Alaska, the two leading producing States, accounted for 73% and 13%, respectively, of domestic gold production in 2022. The remaining 14% of domestic gold production came from mines in Arizona, California, Colorado, Idaho, Michigan, New Mexico, South Carolina, South Dakota, and Utah. Gold was recovered at lode mines in all gold-producing States, at two large placer mines in Alaska, and at numerous small placer mines, mostly in Alaska. In addition, about 6% of domestic mined gold was recovered as a byproduct of the recovery of base metals, primarily copper, and other precious metals, primarily silver. The leading gold-producing operations, listed in table 3, accounted for more than 98% of domestic gold production.

In 2022, total world mine production of gold was 3,160,000 kg compared with 3,120,000 kg (revised) in 2021. In 2022, the top five gold-producing countries, in descending order of production, were China, Australia, Russia, Canada, and the United States, and accounted for 43% of global gold production (tables 1, 8).

In 2022, commercial-grade refined gold was produced by approximately 20 domestic companies, which were located mainly in Massachusetts, New York, Rhode Island, and Utah. In 2022, 181,000 kg of gold was refined from ores and dore, which was essentially unchanged from that in 2021, and 92,600 kg was refined from new and old scrap compared with 92,300 kg in 2021 (table 1).

In 2022, U.S. consumption of gold for jewelry, industry, and the arts was 257,000 kg. Jewelry manufacturing in the United States was concentrated in New York, NY, and Providence, RI, with other major manufacturers in California, Florida, and Texas. In 2022, the share of estimated global gold consumption for commercial products (excluding investment products but including official coinage) was jewelry, 45%; central banks and other institutions, 23%; official physical bar, 16%; coins and medals and imitation coins, 9%; electrical and electronics, 5%; and other, 2% (World Gold Council, 2023a).

Government Actions and Legislation

Gold mining has been identified as a potential source of funding for armed groups involved in civil unrest in several countries, especially in the Democratic Republic of the Congo [Congo (Kinshasa)] and adjoining countries. On July 21, 2010, the United States, through the enactment of section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), made it a statutory obligation for all companies registered with the U.S. Securities and Exchange Commission (SEC) to perform due diligence to determine whether the products they manufacture, contract to have manufactured, or the components of the products they manufacture, contain tantalum, tin, tungsten, or gold

(3TG minerals), and if so, to determine whether these minerals were sourced from Congo (Kinshasa) and (or) its bordering countries. Accordingly, companies are required to file a specialized disclosure report (Form SD) with the SEC including their findings as to whether 3TG minerals used in their products and components are sourced from the conflict region (U.S. Government Accountability Office, 2023, p. 1–3, 7).

In 2022, a total of 1,005 companies filed conflict minerals SD forms (1,021 and 1,057 companies filed disclosures in 2021 and 2020, respectively). In 2022, 51% of the reporting companies were able to preliminarily determine whether the conflict minerals in their products were derived from Congo (Kinshasa) or adjoining countries, whereas 66% and 58% of companies in 2021 and 2020, respectively, reported similarly. The U.S. Government Accountability Office analyzed a generalizable sample of 100 SEC filings and attributed the decrease to sampling variability owing to following a probability procedure based on random selections, and the annual sample is one of many potential samples that could have been drawn. However, the percentages of companies reporting the various Reasonable Country of Origin Inquiry (RCOI) determinations in 2022 had not changed significantly from the percentages reported in 2021 and 2020. Of the filings in 2022, most companies indicated that they used standardized tools and programs when attempting to determine the source of the conflict minerals in their products, which included supplier surveys, smelter and refinery audit programs, and upstream traceability schemes. Reviews of the company filings and the industry experts that were interviewed reported similar challenges had been expressed in prior years, such as lack of access to suppliers, incomplete or incorrect survey information, and survey nonrespondents. Some companies have incorporated the use of blockchain technology tools to enhance their due diligence efforts by compiling information on supply chains in the form of a secure digital trail. The use of blockchain tools as a due diligence tool is not without its limitations, and there is still the possibility that information regarding the origin of a particular shipment of minerals is inaccurately recorded in the blockchain (U.S. Government Accountability Office, 2023, p. 11–20).

Production

Domestic lode mine production data for gold were compiled by the U.S. Geological Survey (USGS) from two separate voluntary monthly surveys of U.S. mining operations and from publicly available sources; the surveys and data estimated from public sources represented 98% of this chapter's tabulated domestic gold production. Data on placer gold production in Alaska were provided by the Alaska Division of Geological & Geophysical Surveys and were included in the domestic production figures. However, individual company production data listed in table 3 or cited elsewhere in this chapter were obtained from published sources, such as company annual reports.

Alaska.—In 2022, Alaska produced 22,200 kg of gold (table 2), from both lode and placer operations, valued at \$1.28 billion. This was an 11% increase in both quantity and value as compared with output in 2021. Gold was produced at 1 open pit gold mine, 2 underground gold mines, 1 underground silver-zinc mine, and about 150 placer operations (Twelker and others, 2022, p. 34, 43, 51–54). Kinross Gold Corp.’s open pit Fort Knox Mine near Fairbanks was Alaska’s leading gold producer and produced 9,060 kg of gold equivalent (which includes other metals converted to gold weight, based on the value of the metal) in 2022, 10% more than that in 2021, owing to increases in mill throughput and gold equivalent recovered from the heap leach pads (table 3) (Kinross Gold Corp., 2023, p. 18).

Northern Star Resources Ltd.’s Pogo Mine, 145 kilometers (km) southeast of Fairbanks, produced 7,550 kg of gold in 2022, a 29% increase from that in 2021, owing to an increase in ore grade and improved performance after a mill expansion (Northern Star Resources Ltd., 2022, p. 17–18; 2023, p. 7, 16). Coeur Mining, Inc.’s underground Kensington Mine, 72 km northwest of Juneau, produced 3,390 kg of gold, a 10% decrease from 2021 production, owing to lower ore grade and lower recoveries (table 3) (Coeur Mining, Inc., 2023, p. 26, 28, 44).

The remaining lode-gold production in Alaska was produced as a byproduct from Hecla Mining Co.’s underground Greens Creek silver-zinc mine on Admiralty Island near Juneau, which produced 1,500 kg of gold, a 5% increase from that in 2021. The increase was owing to record-high throughput (table 3) (Hecla Mining Co., 2023, p. 6, 27).

Colorado.—In 2022, Newmont Corp.’s open pit Cripple Creek & Victor Mine, near the town of Victor, produced 5,660 kg. Production was 17% less than that in 2021, owing to lower leach pad recoveries and less ore milled. The mill was idled on December 31, 2022, and is in long-term care-and-maintenance status (Newmont Corp., 2023, p. 38, 80).

Nevada.—In 2022, companies in Nevada produced about 125,000 kg of gold valued at \$7.3 billion, which was 10% less in quantity and value than that in 2021 (table 2). Nevada retained its long-standing position as the Nation’s leading gold-producing State.

Nevada Gold Mines, LLC produced about 94,200 kg of gold from mines in north-central Nevada, 9% less than production in 2021. The decrease was primarily due to lower recoveries from the leach pad at the Long Canyon Mine after having completed phase 1 mining in May 2022, unplanned maintenance events at the Sage autoclave causing less throughput at the Turquoise Ridge Mine, and lower leach pad recovery and refractory ore tonnage mined at the Cortez operations (Barrick Gold Corp., 2023, p. 74, 81–84).

In 2022, Kinross’s Round Mountain Mine produced 7,040 kg of gold equivalent, 12% less than 2021 production, primarily owing to changes in the mine plan that affected recovery rates. Production at the Bald Mountain Mine was 6,660 kg of gold equivalent, a 4% increase from that in 2021, owing to an increase in gold recovered from heap-leach pads (Kinross Gold Corp., 2023, p. 19–20).

Gold production at Coeur’s Rochester open pit silver mine was 1,080 kg in 2022, an increase of 28% from production

in 2021, primarily owing to increased ore tonnage placed on leach pads and higher gold ore grades (Coeur Mining, Inc., 2023, p. 28, 43–44).

SSR Mining Inc. operated the Marigold open pit mine located about 5 km southwest of Valmy in Humboldt County. The mine produced 6,060 kg of gold in concentrates, a 17% decrease from that in 2021, primarily owing to fines in the ore from the north pits resulting in slower leaching (SSR Mining Inc., 2023, p. 56, 110).

South Carolina.—OceanaGold Corp.’s Haile gold mine produced 5,480 kg of gold in 2022, a 7% decrease from 2021 production owing to lower ore grades (OceanaGold Corp., 2023, p. 18).

South Dakota.—Coeur’s Wharf Mine near the city of Lead produced 2,480 kg of gold in 2022, a 12% decrease from production in 2021 owing to lower ore grades (Coeur Mining, Inc., 2023, p. 27–28, 45).

Utah.—Rio Tinto Kennecott Corp.’s Bingham Canyon Mine near Salt Lake City produced 3,820 kg of gold as a byproduct from copper and molybdenum mining in 2022, a 12% decrease from production in 2021 owing to unplanned maintenance (Rio Tinto Group, 2023, p. 41, 281).

Consumption

Gold consumption in jewelry in the United States was 144 metric tons (t) in 2022, a 4% decrease from that in 2021 owing to consumer spending moving from luxury goods to services. Gold consumption in electronics in the United States was 63.1 t, a slight increase from that in 2021. Gold consumption in other industrial fabrication in the United States was 2.50 t, an increase of 3% from that in 2021. Gold consumption in dental fabrication in the United States was 3.50 t, a decrease of 5% from that in 2021 (Newman and others, 2023, p. 40–41, 53–55; World Gold Council, 2023a; 2023b, p. 4–6).

Global gold consumption in 2022 was 4,740 t, an 18% increase from that in 2021 owing to increased consumption for investment, almost equaling the record-high consumption for investment in 2011. Global gold jewelry consumption in 2022 was 2,190 t, a slight decrease from that in 2021 primarily owing to an economic slowdown and gold prices increasing in the fourth quarter of 2022. In 2022, the top five jewelry-manufacturing countries, in descending order by gold consumed for jewelry, were India (601 t), China (571 t), the United States (144 t), the United Arab Emirates (46.9 t), and Saudi Arabia (37.9 t), accounting for 67% of the world’s gold jewelry fabrication (Newman and others, 2023, p. 8, 39–43; World Gold Council, 2023b, p. 1, 10).

Global consumption of gold for total industrial uses was 309 t, a 7% decrease from that in 2021. Of industrial uses, global gold consumption for electronics (252 t) decreased by 7%, for other industrial applications (46.6 t) was essentially unchanged, and in dental applications (10.3 t) decreased by 9%. The decrease in total industrial uses was due to global economic uncertainty in the fourth quarter combined with supply chain issues and the United States sanctions targeting China’s semiconductor industry. The decrease in dental applications was due to palladium prices reaching an alltime high (palladium being used in gold alloys in dental applications), the ongoing shift

to ceramics, and the 13% drop in consumption in Japan owing to global coronavirus disease 2019 (COVID-19) pandemic concerns curtailing dental visits (Newman and others, 2023, p. 53–55; World Gold Council, 2023a; 2023b, p. 14–15).

Prices and Investment

The Engelhard Unfabricated daily price began the year at \$1,811.00 per troy ounce and increased to the yearly high of \$2,029.00 per troy ounce on March 8. The gold price trended upward until the beginning of the second quarter and into the third quarter of 2022, when it fluctuated before reaching a yearly low of \$1,626.00 per troy ounce on November 3. The price then increased at the end of the fourth quarter and ended the year at \$1,822.00 per troy ounce. The annual average price in 2022 was \$1,801.90 per troy ounce compared with \$1,800.92 per troy ounce in 2021 (table 1).

The components of gold investments are the retail investments (gold bars, official coins, medals, and imitation coins) and the change in physical gold held by gold exchange-traded funds (ETFs). Global net gold investment in 2022 was 1,110 t, a 10% increase from that in 2021 owing in part to increased investment in gold coins. Global gold ETF holdings in 2022 were 3,470 t, a decrease of 3% from that in 2021 owing to investors reducing their holdings in the second half of the year as result of aggressive interest rate hikes. The bulk of the global net retail investment was purchases of gold bars totaling 791 t, a slight decrease from that in 2021. In 2022, global purchases of official coins, medals, and imitation coins increased by 12% to 426 t (Newman and others, 2023, p. 61, 67; World Gold Council, 2023a; 2023b, p. 1, 7–9). In 2022, the U.S. Mint sold 30,500 kg of American Eagle gold bullion coins and 12,800 kg of American Buffalo gold bullion coins, a decrease of 22% and an increase of 17%, respectively, from the quantities sold in 2021 (table 1; U.S. Mint, 2022).

Central banks and similar institutions purchased a net 1,140 t of gold in 2022, 1.5 times higher than that in 2021 and the most ever purchased. The top six buyers of gold in 2022 were Turkey (148 t), China (62 t), Egypt (47 t), Qatar (35 t), and Iraq and Uzbekistan (34 t each) (World Gold Council, 2023a; 2023b, p. 13).

Foreign Trade

The United States was a net exporter (exports minus imports) of nearly 282,000 kg of gold contained in bullion, dore, and ores and concentrates (tables 4, 6). Based on unrounded data, refined bullion constituted 85% of gold exports and 39% of gold imports in 2022.

In 2022, exports of refined bullion were 356,000 kg, 8% more than exports in 2021. Switzerland (52%), the United Kingdom (34%), Singapore (5%), and Canada (3%) were the principal destinations for refined bullion exports from the United States in 2022 (tables 1, 4). Imports of refined bullion were 53,600 kg, 46% less than imports in 2021. Canada (40%), Switzerland (14%), South Africa and Colombia (13% each), and Mexico (9%) were the leading sources of refined bullion imported into the United States in 2022 (tables 1, 6).

Dore exports in 2022 were 60,900 kg, a 16% increase from those in 2021. The primary destinations were Switzerland (49%), India (25%), Australia (9%), Canada (8%), and the United Arab Emirates (5%) (table 4). In 2022, imports of dore were 82,400 kg, 9% less than imports in 2021. Mexico (38%), Colombia (19%), Argentina (16%), Nicaragua (10%), Ecuador (5%), and Canada (3%) were the principal sources of dore in 2022 (table 6).

World Review

According to the World Gold Council, total global supply of gold in 2022 was 4,750 t, a slight increase from that in 2021. Gold recovery from scrap was 1,140 t, essentially unchanged from that in 2021 (World Gold Council, 2023a; 2023b, p. 16). In 2022, U.S. recovery of gold from old and new scrap was 92.6 t, essentially unchanged from that in 2021 (table 1).

In 2022, world mine output of gold was 3,160 t, essentially unchanged from 2021 production (table 8). The 13 leading gold-producing countries, in descending order of production, were China, Australia, Russia, Canada, the United States, Mexico, Kazakhstan, Indonesia, Uzbekistan, Peru, South Africa, Ghana, and Mali; these countries accounted for 68% of global production. Gold production increased by more than 10 t in four countries—China (43.1 t), Indonesia (26.2 t), Mauritania (11.2 t), and Bolivia (10.5 t). Major decreases were recorded in South Africa (19.0 t), Canada (16.7 t), the United States (14.8 t), and Colombia (13.2 t) (table 8).

Australia.—In 2022, gold production in Australia was 313,872 kg, a slight increase from the revised 2021 production (table 8). This increase was due in part to operational changes at several mines, most notably Newmont Corp.’s Boddington Mine and the Gruyere Mine, a joint venture between Gold Fields Ltd. and Gold Road Resources, Ltd. with increased production owing to higher ore grades processed at the Boddington Mine and increased ore grade and ore throughput at the Gruyere Mine. Capricorn Metals Ltd.’s Karlawinda Mine also contributed to increased production owing to a full year of production after commissioning in September 2021. These increases in production were partially offset with lower production at Agnico Eagle Mines, Ltd.’s Fosterville Mine owing to lower ore grades and the primary ventilation system causing low frequency noise emissions resulting in operating restrictions (Capricorn Metals Ltd., 2022, p. 13; Agnico Eagle Mines, Ltd., 2023, p. 29, 87–88; Gold Road Resources, Ltd., 2023, p. 23; Newman and others, 2023, p. 20–21; Newmont Corp., 2023, p. 77). Australia was the world’s second-ranked gold producer after China in 2022 (table 8).

Bolivia.—In 2022, gold production in Bolivia was 53,286 kg, an increase of 24% from 2021 production (table 8). The increase was due primarily to the increase in artisanal and small-scale mining, which accounted for the majority of gold production in the country (Newman and others, 2023, p. 17).

Canada.—Reported gold production in 2022 was 205,831 kg, a decrease of 8% from 2021 production (table 8). Lower production was attributed in part to Agnico Eagle Mines’ LaRonde and Canadian Malartic Mines owing to lower mill throughput, and production at its Doris Mine was suspended February 2022 (Agnico Eagle Mines, Ltd., 2023, p. 66–70, 85–86).

China.—Reported gold production in 2022 was 372,048 kg, an increase of 13% from that in 2021. The increase in production was due primarily to resumption of operations after safety stoppages in 2021 in Shandong Province (Newman and others, 2023, p. 20; World Gold Council, 2023b, p. 16). China continued to be the world's leading gold producer in 2022 (table 8).

China's gold consumption (excluding central bank purchases) was 789,000 kg in 2022, an 18% decrease from that in 2021. Chinese jewelry fabrication (including the use of scrap) accounted for 72% of the country's annual gold consumption of 571,000 kg, a 15% decrease from consumption in 2021 owing to recurrent lockdowns and the ensuing rise in infections related to the COVID-19 pandemic once lockdown restrictions eased. The quantity of gold investment consumption in China in 2022 was 218,000 kg, a 24% decrease from that in 2021 owing primarily to restrictions related to the COVID-19 pandemic because investors were confined to their homes for the majority of 2022 (Newman and others, 2023, p. 73; World Gold Council, 2023a; 2023b, p. 4, 7–9).

Colombia.—In 2022, gold production in Colombia was 42,142 kg, a 24% decrease from 2021 production (table 8). The reduction was attributed to a decline in artisanal and small-scale mining after a surge in the fourth quarter of 2021 (World Gold Council, 2023b, p. 17).

Indonesia.—In 2022, gold production in Indonesia was 105,460 kg, a 33% increase from revised 2021 production (table 8) owing primarily to the continued transition to underground mining at Freeport McMoRan Inc.'s Grasberg Mine in Papua Province (Freeport McMoRan Inc., 2023, p. 6–7; Newman and others, 2023, p. 20).

Mauritania.—In 2022, gold production in Mauritania was 19,300 kg, a more than twofold increase from that in 2021. The increase was due to recovery from a fire at Kinross Gold Corp.'s Tasiast mill in June 2021 that resulted in temporary suspension of milling operations, and the completion of the leach circuit expansion at the Tasiast Mine (Kinross Gold Corp., 2023, p. 1, 4, 29; Newman and others, 2023, p. 20).

South Africa.—In 2022, gold production in South Africa was 88,883 kg, a decrease of 18% from 2021 production (table 8). The decrease was attributed primarily to a strike at Sibanye-Stillwater Ltd.'s South African gold operations resulting in a 42% decrease in gold production from that in 2021 (Newman and others, 2023, p. 17, 22; Sibanye-Stillwater Ltd., 2023, p. 110–111, 166, 278).

Outlook

Historically, investors have purchased gold as a safe haven to hedge against inflation and other economic uncertainty. This also diversified portfolios because of gold's intrinsic value. Overall, worldwide gold mine production is expected to increase in 2023.

References Cited

- Agnico Eagle Mines, Ltd., 2023, Agnico Eagle reports fourth quarter and full year 2022 results—Larger asset portfolio drives record annual gold production, operating cash flow and global mineral reserves; updated three year guidance provided; 2023 focus on optimizing Detour Lake and Canadian Malartic and leveraging excess mill capacity in the Abitibi region to advance key pipeline projects: Toronto, Ontario, Canada, Agnico Eagle Mines, Ltd. news release, February 16, 143 p. (Accessed September 5, 2023, at https://s21.q4cdn.com/374334112/files/doc_news/news_documents/2023/2022-Q4_AEM-Results-2023.02.16-FINAL.pdf.)
- Barrick Gold Corp., 2023, 2022 Q4 report—Barrick delivers on guidance, opens new exploration frontiers: Toronto, Ontario, Canada, Barrick Gold Corp., February 14, 203 p. (Accessed February 23, 2023, at https://s25.q4cdn.com/322814910/files/doc_financial/annual_reports/2022/Barrick_Annual_Report_2022.pdf.)
- Capricorn Metals Ltd., 2022, Annual report 2022: West Perth, Western Australia, Australia, Capricorn Metals Ltd., June 30, 81 p. (Accessed September 5, 2023, at <https://capmetals.com.au/wp-content/uploads/2022/09/2022.10.28-CMM-Annual-Report-2022-FINAL.pdf>.)
- Coeur Mining, Inc., 2023, 2022 annual report and Form 10-K: Chicago, IL, Coeur Mining, Inc., February 22, [variously paged]. (Accessed March 7, 2023, at https://s201.q4cdn.com/254090064/files/doc_events/2023/2022-Annual-Report-PDF.pdf.)
- Freeport-McMoRan Inc., 2023, 2022 annual report—The power of copper: Phoenix, AZ, Freeport-McMoRan Inc., March 24, 115 p. (Accessed September 9, 2023, at https://s22.q4cdn.com/529358580/files/doc_financials/annual/AR_2022.pdf.)
- Gold Road Resources, Ltd., 2023, 2022 annual report: West Perth, Western Australia, Australia, Gold Road Resources, Ltd., March 27, 111 p. (Accessed September 5, 2023, at https://goldroad.com.au/wp-content/uploads/2023/03/2022-Annual-Report_web.pdf.)
- Hecla Mining Co., 2023, 2022 annual report and Form 10-K—2022: Coeur d'Alene, ID, Hecla Mining Co., February 17, [variously paged]. (Accessed February 23, 2023, at https://s29.q4cdn.com/244919359/files/doc_financials/2022/418140-1-1_Hecla-Mining_ARS_Courtesy-PDF-From-EDGAR.pdf.)
- Kinross Gold Corp., 2023, Kinross Gold 2022 annual report: Toronto, Ontario, Canada, Kinross Gold Corp., February 15, [variously paged]. (Accessed March 7, 2023, at https://s2.q4cdn.com/496390694/files/doc_financials/annual/2023/35576-kinross2022-ar-bookmarked-pdf.pdf.)
- Newman, Philip; Meader, Neil; Swarts, Wilma; Klapwijk, Philip; Liang, Junlu; Chou, Elvis; Gao, Yiyi; Barot, Harshal; Furuno, Ayako; Rey, Francesca; Yau, Simon; Adarsh, Diwe; Kavalis, Nikos; Webb, Adam; Munro, Dale; Smith, Jacob; Ryan, Peter; Sheth, Chirag; Küçükemiroglu, Çağdaş; Bedford, Michael; Tomlinson, Sarah; Gao, Jie; Zarate, Celine; and Karekar, Ghananshu, 2023, Gold focus 2023: London, United Kingdom, Metals Focus, 104 p.
- Newmont Corp., 2023, 2022 annual report and Form 10-K: Greenwood Village, CO, Newmont Corp., February 23, [variously paged]. (Accessed March 7, 2023, at https://s24.q4cdn.com/382246808/files/doc_financials/2022/ar/Newmont-2022-Annual-Report.pdf.)
- Northern Star Resources Ltd., 2022, Annual report 2022: Subiaco, Western Australia, Australia, Northern Star Resources Ltd., August 29, 180 p. (Accessed February 22, 2023, at <https://www.nsr ltd.com/investor-and-media/asx-announcements/2022/august/2022-annual-report>.)
- Northern Star Resources Ltd., 2023, Quarterly report December 2022: Subiaco, Western Australia, Australia, Northern Star Resources Ltd., January 19, 16 p. (Accessed February 22, 2023, at <https://www.nsr ltd.com/investor-and-media/asx-announcements/2023/january/quarterly-activities-report-december-2022>.)

OceanaGold Corp., 2023, Management discussion and analysis—Fourth quarter and full year 2022 results: Melbourne, Victoria, Australia, OceanaGold Corp., February 21, 34 p. (Accessed March 7, 2023, at <https://ogc.irmau.com/site/pdf/bf7529ba-c318-467e-88ae-a1a74841b71e/OceanaGold-Q4-and-Full-Year-2022-MDA.pdf>.)

Rio Tinto Group, 2023, Annual report 2022: London, United Kingdom, Rio Tinto Group, February 22, 348 p. (Accessed February 23, 2023, via <https://www.riotinto.com/en/invest/reports/annual-report>.)

Sibanye-Stillwater Ltd., 2023, Integrated report for the year ended 2022: Westonaria, South Africa, Sibanye-Stillwater Ltd., April 24, 288 p. (Accessed September 9, 2023, at <https://reports.sibanyestillwater.com/2022/download/ssw-IR22.pdf?v=20231205>.)

SSR Mining Inc., 2023, 2022 annual report and Form 10-K: Vancouver, British Columbia, Canada, SSR Mining Inc., February 22, 185 p. (Accessed February 23, 2023, at [https://s22.q4cdn.com/546540291/files/doc_financials/2022/q4/2022-10-K-Financial-Statements-and-Footnotes-Draft-\(US-GAAP\).pdf](https://s22.q4cdn.com/546540291/files/doc_financials/2022/q4/2022-10-K-Financial-Statements-and-Footnotes-Draft-(US-GAAP).pdf).)

Twelker, Evan, Werdon, M.B., and Athey, J.E., 2022, Alaska's mineral industry 2020: Fairbanks, AK, Alaska Division of Geological & Geophysical Surveys Special Report 76, 75 p. (Accessed July 19, 2022, at <https://dggs.alaska.gov/webpubs/dggs/sr/text/sr076.pdf>.)

U.S. Government Accountability Office, 2023, Conflict minerals—2022 company reports on mineral sources were similar to those filed in prior years: Washington, DC, U.S. Government Accountability Office, GAO-23-106295, July, 36 p. (Accessed August 25, 2023, at <https://www.gao.gov/assets/gao-23-106295.pdf>.)

U.S. Mint, 2022, Bullion sales: Washington, DC, U.S. Mint. (Accessed August 11, 2023, via <https://www.usmint.gov/about/production-sales-figures/bullion-sales>.)

World Gold Council, 2023a, Gold demand trends data tables: London, United Kingdom, World Gold Council. (Accessed March 27, 2023, via https://www.gold.org/download/file/17710/GDT-FY-2022-Statistics_EN.xlsx.)

World Gold Council, 2023b, Gold demand trends—Full year and Q4 2022: London, United Kingdom, World Gold Council, January 31, 24 p. (Accessed March 27, 2023, via <https://www.gold.org/download/file/17711/GDT-FY-2022.pdf>.)

GENERAL SOURCES OF INFORMATION

U.S. Geological Survey Publications

Conflict Minerals from the Democratic Republic of the Congo—Gold Supply Chain. Fact Sheet 2015–3075, 2015.

Estimated Water Requirements for Gold Heap-Leach Operations. Open-File Report 2012–1085, 2012.

Geology and Resources of Gold in the United States. Bulletin 1857, 1988.

Gold. Ch. in Mineral Commodity Summaries, annual.

Gold. Ch. in United States Mineral Resources, Professional Paper 820, 1973.

Gold. Mineral Industry Surveys, monthly.

Gold (Au). Ch. in Metal Prices in the United States Through 2010, Scientific Investigations Report 2012–5188, 2013.

Gold Recycling in the United States in 1998. Ch. in Flow Studies for Recycling Metal Commodities in the United States, Circular 1196–A—M, 2004.

Historical Statistics for Mineral and Material Commodities in the United States. Data Series 140.

Principal Gold Producing Districts of the United States. Professional Paper 610, 1968.

Review of Selected Global Mineral Industries in 2011 and an Outlook to 2017. Open-File Report 2013–1091, 2013.

Other

Gold. Ch. in Mineral Facts and Problems, U.S. Bureau of Mines Bulletin 675, 1985.

World Gold—A Minerals Availability Appraisal. U.S. Bureau of Mines Special Publication 24, 1994.

TABLE 1
SALIENT GOLD STATISTICS¹

		2018	2019	2020	2021	2022
United States:						
Production:						
Mine:						
Quantity	kilograms	226,000	201,000	193,000	187,000	173,000
Value	thousands	\$9,220,000	\$9,010,000	\$11,000,000	\$10,900,000	\$10,000,000
Gold recovered by cyanidation, leached in open heaps or dumps ²	kilograms	197,000	186,000	170,000 ^c	NA	NA
Refinery:						
From ore concentrates and dore	do.	181,000	205,000	181,000	181,000	181,000
From recycled materials (new and old scrap)	do.	93,500	116,000	91,800 ^r	92,300	92,600
Exports, refined bullion	do.	299,000	264,000	243,000	329,000	354,000
Imports for consumption, refined bullion	do.	81,100	86,700	426,000	100,000	53,600
Stocks, December 31:						
Industry ³	do.	3,380	3,380	3,670	3,680	3,700
Gold exchange traded funds holdings	do.	2,320,000 ⁴	2,890,000 ⁵	3,750,000 ⁵	3,570,000 ⁵	3,470,000 ⁵
COMEX inventories	do.	262,000	271,000	1,190,000	1,050,000	721,000
U.S. Department of the Treasury ⁶	do.	8,130,000	8,130,000	8,130,000	8,130,000	8,130,000
Consumption:						
American Buffalo gold bullion coin ⁷	do.	3,780	1,910	7,530	10,900	12,800
American Eagle gold bullion coin ⁷	do.	7,640	4,730	26,300	39,000	30,500
Jewelry, industry, and the arts ^{5,8}	do.	154,000	151,000	187,000	265,000 ^r	257,000
Price, average ⁹	dollars per troy ounce	1,271.80	1,395.25	1,773.54	1,800.92	1,801.90
Employment, mine and mill only ¹⁰		11,600 ^r	11,800 ^r	12,200 ^r	12,500 ^r	12,300
World:						
Production, mine ¹¹	kilograms	3,310,000	3,260,000	3,050,000 ^r	3,120,000 ^r	3,160,000
Official bullion reserves ^{5,12}	do.	34,200,000	34,800,000	35,300,000	35,500,000	35,500,000

^cEstimated. ^rRevised. do. Ditto. NA Not available.

¹Table includes data available through August 14, 2023. Data are rounded to no more than three significant digits, except prices.

²May include tailings, waste-ore dumps, and previously mined ore at some inactive mines.

³Unfabricated refined gold held by refiners, fabricators, and dealers.

⁴Source: GFMS Ltd., Thomson Reuters.

⁵Source: World Gold Council.

⁶Source: U.S. Department of Treasury's annual Agency Financial Report.

⁷Source: U.S. Mint.

⁸Includes gold used in the production of consumer purchased bar, coins, and jewelry. Excludes gold as an investment (except consumer purchased bar and coins).

⁹Annual average daily Engelhard Unfabricated quotation. Source: S&P Global Platts Metals week.

¹⁰Source: U.S. Mine Safety and Health Administration.

¹¹May include estimated data.

¹²Held by central banks, governments, and international monetary organizations at the end of the year.

TABLE 2
MINE PRODUCTION OF GOLD IN THE UNITED STATES, BY STATE¹

(Kilograms)

State	2021	2022
Alaska	20,000	22,200
Nevada	139,000	125,000
Other States ²	28,000	25,200
Total	187,000	173,000

¹Table includes data available through August 14, 2023. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes Arizona, California, Colorado, Idaho, Michigan, New Mexico, South Carolina, South Dakota, and Utah.

TABLE 3
LEADING GOLD-PRODUCING OPERATIONS IN THE UNITED STATES, IN ORDER OF OUTPUT IN 2022¹

(Kilograms)

Rank	Mine	County and State ²	Majority owner ³	Quantity	
				2021	2022
1	Carlin Mines operations ⁴	Elko and Eureka, NV	Nevada Gold Mines LLC ⁵	23,500	27,800
2	Cortez operations	Eureka and Lander, NV	do.	25,800 ^r	20,900
3	Turquoise Ridge ⁶	Humboldt, NV	do.	16,900 ^r	14,300
4	Betze-Post	Elko and Eureka, NV	Nevada Gold Mines LLC ⁵	21,900	12,490
5	Fort Knox	Eastern Interior Region, AK	Kinross Gold Corp.	8,220 ⁷	9,060 ⁷
6	Pogo	do.	Northern Star Resources Ltd.	5,860	7,550
7	Round Mountain	Nye, NV	Kinross Gold Corp.	7,990 ⁷	7,040 ⁷
8	Bald Mountain	White Pine, NV	do.	6,370 ⁷	6,660 ⁷
9	Marigold	Humboldt, NV	SSR Mining Inc.	7,320 ⁸	6,060 ⁸
10	Cripple Creek & Victor	Teller, CO	Newmont Corp.	6,840	5,660
11	Phoenix	Lander, NV	Nevada Gold Mines LLC ⁵	5,540 ^r	5,510
12	Haile	Lancaster, SC	OceanaGold Corp.	5,910	5,480
13	Mesquite	Imperial, CA	Equinox Gold Corp.	4,280	3,860
14	Bingham Canyon	Salt Lake, UT	Rio Tinto Kennecott Corp. ⁹	4,340	3,820
15	Kensington	Southeastern Region, AK	Coeur Mining, Inc.	3,770	3,390
16	Long Canyon	Elko, NV	Nevada Gold Mines LLC ⁵	8,120	2,800
17	Wharf	Lawrence, SD	Coeur Mining, Inc.	2,840 ^r	2,480
18	Jerritt Canyon	Elko, NV	First Majestic Silver Corp. ¹⁰	3,060	2,250
19	Goldrush	Eureka, NV	Nevada Gold Mines LLC ⁵	1,090	1,860
20	Florida Canyon	Pershing, NV	Argonaut Gold Inc.	1,680	1,540
21	Greens Creek	Southeastern Region, AK	Hecla Mining Co.	1,430	1,500
22	Pan	White Pine, NV	Calibre Mining Corp.	1,420	1,290
23	Robinson	do.	KGHM International Ltd.	1,280	1,290
24	Isabella Pearl	Mineral, NV	Fortitude Gold Corp. ¹¹	1,450	1,280
25	South Arturo	Elko, NV	Nevada Gold Mines LLC ⁵	1,660 ^r	1,120
26	Rochester	Pershing, NV	Coeur Mining, Inc.	841	1,080
27	Moss	Mohave, AZ	Elevation Gold Mining Corp. ¹²	905	967
28	Gold Bar	Eureka, NV	McEwen Mining Inc.	1,360	828
29	Castle Mountain	San Bernardino, CA	Equinox Gold Corp.	786	722
30	Hycroft	Humboldt and Pershing, NV	Hycroft Mining Co.	1,740 ^r	493
31	Rawhide	Mineral, NV	Coral Reef Capital LLC	722	418
32	Ruby Hill	Eureka, NV	i-80 Gold Corp. ¹³	269	405
33	Borealis	Mineral, NV	Waterton Global Resource Management, Inc.	122	372
34	Lone Tree	Humboldt, NV	i-80 Gold Corp. ¹³	273	251
35	Golden Chest	Shoshone, ID	Idaho Strategic Resources, Inc. ¹⁴	150	187
36	Granite Creek	Humboldt, NV	i-80 Gold Corp.	NA	116
37	Relief Canyon	Pershing, NV	Americas Gold and Silver Corp.	168	70 ¹⁵
38	Fire Creek	Lander, NV	Hecla Mining Co.	645	69 ¹⁶
(17)	Mineral Ridge	Esmeralda, NV	Scorpio Gold Corp.	57	NA
(17)	Bagdad	Yavapai, AZ	Freeport-McMoRan Inc.	NA	NA
(17)	Chino	Grant, NM	do.	NA	NA
(17)	Eagle	Marquette, MI	Lundin Mining Corp.	NA	NA
(17)	Morenci	Greenlee, AZ	Freeport-McMoRan Inc.	NA	NA
(17)	Soledad Mountain	Kern, CA	Golden Queen Mining Co., LLC	NA	NA
(17)	Spring Valley	Lyon, NV	Geo-Nevada Inc.	NA	NA

¹Revised. do. Ditto. NA Not available from publicly available information.

²Table includes data available through August 14, 2023. The mines on this list accounted for more than 98% of U.S. production of gold in 2022. Data are rounded to no more than three significant digits. Data shown are from publicly available information and may differ from proprietary information used to generate the U.S. totals listed in tables 1 and 8.

³For Alaska, mines are located by geographic region, as delineated by the Alaska Division of Geological & Geophysical Surveys in its Special Report 76, Alaska's mineral industry 2020.

⁴When multiple owners are listed, the operating owner is listed first, and when only one owner is listed, the company has full ownership. As of October 31, 2022.

⁵Includes four open pit operations and four underground operations. Does not include Betse Post, Cortez, Goldrush, Long Canyon, Phoenix, South Arturo, Turquoise Ridge, and Twin Creek Mines, which are listed separately.

⁶Nevada Gold Mines LLC is a joint venture between Barrick Gold Corp. (61.5%) and Newmont Mining Corp. (38.5%).

⁷Includes the Twin Creeks Mine.

⁸Quantity refers to the reported total gold equivalent of coproduct or byproduct metals recovered.

⁹Quantity refers to total quantity of gold content of concentrates produced.

¹⁰Wholly owned subsidiary of Rio Tinto Group.

TABLE 3—Continued
LEADING GOLD-PRODUCING OPERATIONS IN THE UNITED STATES, IN ORDER OF OUTPUT IN 2022¹

¹⁰On April 30, 2021, First Majestic Silver Corp. acquired the Jerritt Canyon Mine.

¹¹Wholly owned subsidiary of Gold Resource Corp.

¹²On September 24, 2021, Northern Vertex Mining Corp. changed its name to Elevation Gold Mining Corp.

¹³i-80 Gold Corp. acquired the Lone Tree Mine on October 14, 2021, and the Ruby Hill Mine on October 18, 2021.

¹⁴On December 6, 2021, New Jersey Mining Company changed its name to Idaho Strategic Resources, Inc.

¹⁵On August 13, 2021, Americas Gold and Silver Corp. temporarily suspended mining operations at Relief Canyon Mine. Quantity refers to residual production, as mining operations remained suspended through 2022.

¹⁶The Fire Creek Mine was placed on care-and-maintenance status in the second quarter of 2021.

¹⁷The rank order is not shown to avoid disclosing company proprietary data.

Sources: Company annual reports, company 10-K reports submitted to the U.S. Securities and Exchange Commission, and State geologists.

TABLE 4
U.S. EXPORTS OF REFINED GOLD, BY COUNTRY OR LOCALITY¹

(Kilograms, gold content, and thousand dollars)

Year and country or locality	Ores and concentrates ²		Dore and precipitates		Refined bullion ³		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2021	3,860	213,000	52,600	3,060,000	329,000	18,900,000	386,000	22,200,000
2022:								
Armenia	--	--	--	--	8	488	8	488
Australia	(4)	3	5,400	312,000	1,220	72,900	6,610	385,000
Austria	--	--	--	--	17	856	17	856
Canada	58	2,790	4,960	263,000	10,300	630,000	15,300	896,000
Cayman Islands	--	--	247	14,000	123	7,440	370	21,400
China	58	3,150	8	475	2	98	68	3,720
Estonia	--	--	40	2,390	--	--	40	2,390
France	--	--	53	2,940	1	56	54	2,990
Germany	612	34,500	20	1,120	186	9,960	817	45,600
Guatemala	--	--	--	--	21	1,180	21	1,180
Hong Kong	2	90	23	1,270	5,360	295,000	5,380	296,000
India	--	--	15,300	877,000	7,730	475,000	23,100	1,350,000
Indonesia	--	--	--	--	21	1,110	21	1,110
Iraq	--	--	7	439	--	--	7	439
Italy	(4)	3	1,420	77,800	67	4,160	1,490	82,000
Japan	1,070	60,600	--	--	32	1,860	1,100	62,500
Korea, Republic of	5	272	--	--	--	--	5	272
Kuwait	--	--	--	--	86	5,180	86	5,180
Laos	--	--	--	--	7	396	7	396
Lebanon	--	--	6	357	--	--	6	357
Liechtenstein	--	--	--	--	102	6,110	102	6,110
Malaysia	--	--	70	3,820	(4)	10	70	3,830
Mexico	--	--	--	--	656	37,500	656	37,500
Oman	--	--	32	1,690	51	2,930	83	4,620
Panama	--	--	(4)	24	16	949	16	973
Peru	--	--	--	--	394	22,100	394	22,100
Poland	--	--	4	231	2	102	6	333
Singapore	--	--	--	--	19,100	1,080,000	19,100	1,080,000
South Africa	--	--	112	6,480	107	5,910	219	12,400
Sweden	17	727	--	--	--	--	17	727
Switzerland	--	--	30,000	1,780,000	184,000	10,600,000	213,000	12,400,000
Taiwan	1,590	86,200	14	778	19	1,430	1,630	88,400
Thailand	--	--	--	--	1,560	84,200	1,560	84,200
Tokelau	--	--	--	--	95	5,720	95	5,720
Turkey	--	--	45	2,440	5,300	296,000	5,350	299,000
United Arab Emirates	1	23	3,090	170,000	396	22,700	3,490	193,000
United Kingdom	--	--	1	44	119,000	6,890,000	119,000	6,890,000
Vietnam	--	--	--	--	5	284	5	284
Other	(4)	10	4	229	5	303	9	543
Total	3,410	188,000	60,900	3,520,000	356,000	20,500,000	420,000	24,200,000

-- Zero.

¹Table includes data available through August 2, 2023. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes base-metal ores, concentrates, and matte destined for refining.

³Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold is excluded.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF GOLD-BEARING MATERIALS, BY COUNTRY OR LOCALITY¹

(Kilograms, gross weight, and thousand dollars)

Year and country or locality	Waste and scrap		Metal powder		Gold compounds	
	Quantity	Value	Quantity	Value	Quantity	Value
2021	71,400	2,900,000	1,430	84,200	1,070	226,000
2022:						
Belgium	4	230	--	--	7	41
Canada	62,200	2,580,000	5	309	1,600	11,200
Chile	--	--	--	--	25	262
China	--	--	20	1,190	2,120	10,100
Costa Rica	--	--	--	--	351	13,600
Dominican Republic	--	--	--	--	3	80
France	(2)	9	(2)	15	6,610	944
Germany	67	2,510	1	71	909	525
Guatemala	--	--	--	--	12	89
Hong Kong	(2)	13	118	6,590	41	77
India	3	156	96	5,480	142	3,750
Israel	--	--	(2)	15	6	187
Italy	27	1,490	4	232	98	308
Japan	90	5,180	21	1,150	2,960	51
Korea, Republic of	86	1,860	87	5,090	19,500	11,400
Malaysia	31	1,290	--	--	417	10,600
Mexico	--	--	32	1,870	3,720	45,900
Netherlands	--	--	--	--	10	282
Peru	--	--	(2)	4	683	20
Singapore	(2)	7	(2)	28	3,070	44,100
Sweden	22	1,240	--	--	81	18
Switzerland	2,160	98,800	--	--	565	2,130
Taiwan	--	--	16	913	360	933
Thailand	39	1,930	2	135	3	24
United Kingdom	21	1,130	13	723	108	133
Other	11	283	6	363	186	2,930
Total	64,800	2,700,000	424	24,200	43,600	160,000

-- Zero.

¹Table includes data available through August 2, 2023. Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF REFINED GOLD, BY COUNTRY OR LOCALITY¹

(Kilograms, gold content, and thousand dollars)

Year and country or locality	Ores and concentrates ²		Dore and precipitates		Refined bullion ³		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2021	907	10,800	90,600	5,130,000	100,000	5,780,000	192,000	10,900,000
2022:								
Argentina	--	--	12,900	724,000	--	--	12,900	724,000
Australia	--	--	31	1,490	1,570	108,000	1,610	110,000
Austria	--	--	(4)	22	9	377	9	399
Barbados	--	--	10	590	2	83	12	673
Belgium	--	--	--	--	40	2,190	40	2,190
Bolivia	--	--	74	4,080	--	--	74	4,080
Brazil	--	--	49	2,710	98	5,110	147	7,820
Canada	1,740	19,900	2,300	131,000	21,300	1,300,000	25,400	1,450,000
Chile	--	--	691	40,100	82	4,450	773	44,600
Colombia	--	--	15,300	870,000	6,820	379,000	22,100	1,250,000
Costa Rica	--	--	586	24,000	255	9,850	841	33,800
Curacao	--	--	10	474	--	--	10	474
Dominican Republic	--	--	1,200	71,000	--	--	1,200	71,000
Ecuador	--	--	4,370	250,000	75	3,730	4,440	254,000
France	--	--	--	--	524	29,900	524	29,900
Germany	--	--	187	9,510	615	35,100	802	44,600
Ghana	--	--	4	222	9	341	13	563
Guatemala	--	--	166	8,410	--	--	166	8,410
Guyana	--	--	288	16,600	48	2,700	336	19,300
Honduras	--	--	1,980	115,000	--	--	1,980	115,000
Hong Kong	--	--	(4)	4	598	37,900	598	37,900
Israel	--	--	--	--	5	227	5	227
Japan	--	--	--	--	82	4,670	82	4,670
Kenya	--	--	14	793	--	--	14	793
Liberia	--	--	--	--	12	566	12	566
Mexico	--	--	31,300	1,840,000	5,040	292,000	36,300	2,130,000
Nicaragua	--	--	8,320	483,000	364	19,000	8,690	502,000
Panama	--	--	298	17,200	166	7,680	464	24,800
Paraguay	--	--	48	2,660	--	--	48	2,660
Peru	--	--	1,390	80,500	311	17,400	1,710	97,900
South Africa	--	--	--	--	7,150	440,000	7,150	440,000
Suriname	--	--	8	379	3	160	11	539
Switzerland	--	--	73	4,510	7,390	429,000	7,460	433,000
Tanzania	--	--	(4)	12	9	438	9	450
Turkey	--	--	102	6,670	859	46,000	960	52,700
United Arab Emirates	--	--	562	36,900	27	1,460	589	38,300
United Kingdom	--	--	106	4,050	22	1,210	128	5,260
Uruguay	--	--	39	1,990	1	54	40	2,050
Venezuela	--	--	--	--	102	5,460	102	5,460
Other	--	--	7	363	10	460	18	822
Total	1,740	19,900	82,400	4,750,000	53,600	3,180,000	138,000	7,950,000

-- Zero.

¹Table includes data available through August 2, 2023. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes base-metal ores, concentrates, and matte destined for refining.

³Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold is excluded.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS OF GOLD-BEARING MATERIALS, BY COUNTRY OR LOCALITY¹

(Kilograms, gross weight, and thousand dollars)

Year and country or locality	Waste and scrap		Metal powder		Gold compounds	
	Quantity	Value	Quantity	Value	Quantity	Value
2021	18,400	560,000	404	15,500	6,550	6,870
2022:						
Antigua and Barbuda	4	107	--	--	--	--
Aruba	22	671	--	--	--	--
Bahamas, The	33	948	--	--	--	--
Barbados	12	243	--	--	--	--
Bolivia	24	907	--	--	--	--
Canada	3,090	85,100	17	604	11	219
Chile	99	3,790	--	--	--	--
Costa Rica	2,100	14,500	(2)	15	--	--
Curacao	43	1,570	--	--	--	--
Dominica	13	407	--	--	--	--
Dominican Republic	796	28,700	--	--	--	--
Ecuador	827	31,300	--	--	--	--
El Salvador	96	1,950	--	--	--	--
French Polynesia	9	239	--	--	--	--
Germany	569	27,100	148	5,840	2,980	882
Grenada	5	145	--	--	--	--
Guatemala	109	2,790	--	--	--	--
Honduras	708	30,900	--	--	--	--
Ireland	34	148	--	--	--	--
Italy	6	68	--	--	334	58
Jamaica	131	3,310	--	--	--	--
Japan	--	--	20	376	427	884
Malaysia	1,320	4,020	--	--	--	--
Mexico	3,700	96,400	--	--	--	--
Nicaragua	30	745	--	--	--	--
Panama	965	32,800	--	--	--	--
Philippines	27	758	--	--	--	--
Spain	51	1,390	--	--	--	--
St. Lucia	18	500	--	--	--	--
St. Vincent and the Grenadines	7	194	--	--	--	--
Switzerland	5	113	55	2,180	22	104
Taiwan	26	1,480	--	--	--	--
Thailand	22	352	--	--	--	--
Trinidad and Tobago	216	4,900	--	--	--	--
Turkey	5	111	--	--	--	--
United Kingdom	11	182	6	224	1,360	431
Uruguay	11	348	--	--	--	--
Venezuela	184	6,520	--	--	--	--
Other	20	502	2	35	10	3
Total	15,300	386,000	249	9,270	5,140	2,580

-- Zero.

¹Table includes data available through August 2, 2023. Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8
GOLD: WORLD MINE PRODUCTION, BY COUNTRY OR LOCALITY¹

(Kilograms)

Country or locality ²	2018	2019	2020	2021	2022
Algeria	128	53	71	110 ^r	100 ^e
Argentina	58,375	53,092	37,100	43,000 ^{r, e}	43,000 ^e
Armenia	4,970	5,110	4,000 ^e	2,500 ^e	4,000 ^e
Australia	313,028	326,304	327,952 ^r	307,170 ^r	313,872
Azerbaijan	3,476	3,712	3,571	3,351 ^r	3,175
Bolivia	29,976	42,040	23,207	42,816 ^r	53,286
Botswana	1,105	943	851	649	427
Brazil	85,301	89,988	79,619	60,669	61,000 ^e
Bulgaria, concentrate	8,995	9,924	11,300	10,900	10,000 ^e
Burkina Faso ³	53,234	51,406	62,138	67,126 ^r	58,130
Burma	710	330	840	773	770 ^e
Burundi	1,898	1,599	863	893 ^r	42 ^e
Cambodia	NA	NA	NA	1,400 ^e	3,300 ^e
Cameroon ^e	478 ^r	341 ^r	326 ^r	330 ^{r, e}	300 ^e
Canada	191,882	190,651	178,055	222,524	205,831
Central African Republic	142	359	401 ^r	858 ^r	1,000 ^e
Chile	37,066	38,455	33,895	34,248	30,966
China	401,119	380,230	365,340	328,980	372,048
Colombia	35,965 ^r	38,007	48,561	55,321	42,142
Congo (Kinshasa) ^e	44,000	45,000	43,000	43,000	43,000
Costa Rica	5,200	4,500	599 ^r	647 ^r	864
Côte d'Ivoire	24,500	32,600	20,907	42,000 ^r	48,000
Cyprus	47	33	61	--	--
Dominican Republic	31,633	31,800	28,154	25,440 ^r	25,000 ^e
Ecuador	8,213	6,293	9,086	12,614	16,000 ^e
Egypt	14,680	14,944	14,069	12,919	13,716
Eritrea ^e	3,700	4,000	4,300	4,400	4,200
Eswatini	12	6	1	-- ^r	--
Ethiopia ⁴	3,495	3,480	3,480 ^e	3,480 ^e	3,480 ^e
Fiji	1,281	1,106	1,090	1,107	584
Finland	8,732	7,927	8,668	9,082	8,390
French Guiana	1,320	1,157	1,058	1,225 ^r	916
Gabon	--	100 ^e	100 ^e	100 ^e	100 ^e
Georgia	2,900 ^e	4,052	5,401	3,513	4,908
Ghana	148,336	141,982	125,552	87,649	88,000 ^e
Greece	2,839	2,333	2,177	3,315 ^r	3,000 ^e
Guatemala ^e	200	200	200	200	200
Guinea	14,779	13,663	13,336	17,941	21,232
Guyana	19,069	19,963	18,210	15,522	15,129
Honduras	2,064	1,931	1,980 ^e	2,845	2,800 ^e
India	1,554	1,896	1,225	1,220 ^r	1,200 ^e
Indonesia ⁵	132,734	108,977	65,900	79,280 ^r	105,460
Iran ^{e, 6}	7,600	8,500	7,000 ^r	7,000 ^r	7,000
Japan	6,453	6,322	7,590	7,500 ^e	7,500 ^e
Kazakhstan	100,288	106,559	116,964	114,843 ^r	115,000 ^e
Kenya	472	395	150	292	565
Korea, North ^e	1,000	1,000	1,000	1,000	1,000
Korea, Republic of	238	181	189	162	128
Kyrgyzstan	27,400	26,849	22,400	24,900	25,337 ^e
Laos	5,579	5,207	5,499	9,943	9,900 ^e
Liberia	7,096	5,000 ^e	4,300 ^e	7,800 ^e	11,700 ^e
Madagascar	3,000	2,100	1,500	1,500 ^e	1,500 ^e
Malaysia	2,520	3,151	1,716	1,800 ^{r, e}	1,800 ^e
Mali	55,029	61,000 ^e	65,300 ^r	63,400 ^r	64,000 ^e
Mauritania	9,235	14,484	19,725	8,100	19,300
Mexico	117,323	111,404	101,631	120,000 ^e	120,000 ^e
Mongolia	20,655	16,251	20,226	19,054 ^r	19,000 ^e
Morocco	386	221	143	147	140 ^e
Mozambique	507	430	488	764 ^r	1,264

See footnotes at end of table.

TABLE 8—Continued
GOLD: WORLD MINE PRODUCTION, BY COUNTRY OR LOCALITY¹

(Kilograms)

Country or locality ²	2018	2019	2020	2021	2022
Namibia	6,171	6,526	6,254	6,850 ^r	6,812
New Zealand	10,045	8,217	5,860	5,815 ^r	5,800 ^e
Nicaragua	7,703	9,190	8,087	11,144	11,000 ^e
Niger	1,000 ^e	5,224	2,361	2,000 ^{r, e}	2,000 ^e
Nigeria	34	38	400 ^r	349 ^r	350 ^e
Panama	400 ^e	1,869	2,634	4,405	4,400 ^e
Papua New Guinea	64,532	73,900	53,000 ^r	45,000 ^r	45,000 ^e
Peru	140,211	128,413	87,457	97,339 ^r	96,740
Philippines	20,765	20,646	21,030	25,332	29,036
Poland, metal	523	674	878	768 ^r	800 ^e
Russia	277,139	304,697	308,560	313,830 ^r	310,000 ^e
Rwanda ^e	2,900	2,900	2,600	2,900	2,900
Senegal	12,507	12,987	12,408	15,860	15,800 ^e
Serbia	839	1,676	1,550	4,800	7,290
Sierra Leone	446	76	120	60	60 ^e
Slovakia	515	346	336	392 ^r	399
Solomon Islands	442 ^r	435 ^r	335 ^r	293 ^r	546
South Africa	117,144	105,185	95,786 ^r	107,890 ^r	88,883
Spain	1,768	1,870	1,531 ^r	1,430 ^r	1,400 ^e
Sudan ⁷	93,600	43,300	35,700	49,700	41,800
Suriname	25,536	24,105	20,871	18,382	18,000 ^e
Sweden	7,866	7,972	8,249	8,805	8,800 ^e
Tajikistan	6,400	8,100	7,595	8,079	11,907
Tanzania	39,304	48,408	55,508	59,638	56,943
Togo ^{e, 8}	20,000	20,000	20,000	20,000	20,000
Turkey	28,000 ^r	39,000 ^r	42,100 ^r	39,290 ^r	39,000 ^e
Uganda ^e	1,500	2,200 ^r	2,500 ^r	2,900 ^r	3,200
United Kingdom	3 ^e	50	28	50 ^e	50 ^e
United States	226,000	201,000	193,000	187,000	173,000
Uruguay ⁹	860	94	--	--	--
Uzbekistan	92,716	100,900	104,600	103,600 ^r	104,000 ^e
Venezuela ^e	480	480	480	480	480
Vietnam	560 ^e	540	550 ^e	600 ^e	600 ^e
Zambia	4,044	4,522	3,993	3,987	3,409
Zimbabwe	35,054	29,386	25,100	31,486 ^r	37,355
Total	3,310,000	3,260,000	3,050,000 ^r	3,120,000 ^r	3,160,000

^eEstimated. ^rRevised. NA Not available. -- Zero.

¹Table includes data available through August 14, 2023. All data are reported unless otherwise noted; totals may include estimated data. Totals, U.S. data, and estimated data are rounded to no more than three significant digits; may not add to totals shown.

²In addition to the countries and (or) localities listed, Benin, Chad, Cuba, El Salvador, Equatorial Guinea, Haiti, Malawi, North Macedonia, Pakistan, Paraguay, Portugal, and South Sudan may have produced gold (either as undocumented artisanal or byproduct production), but available information was inadequate to make reliable estimates of output.

³Does not include artisanal or byproduct production.

⁴Production is based on fiscal year, with a starting date of July 8 of the year shown.

⁵Does not include production from so-called people's mines, which may be as much as 20,000 kilograms per year, but includes gold recovered as byproduct of copper mining.

⁶Includes gold recovered from the Mouteh gold mine and from the Sarcheshmeh copper complex.

⁷Reported exports.

⁸Data reported by the Government of Togo as exports predominately included artisanal gold mine production transiting Togo from neighboring countries, and to a lesser extent, domestic artisanal mine production. Data may include gold from other artisanal sources.

⁹Production is based on fiscal year, with a starting date of April 1 of the year shown.