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## NEWMONT Development Of Projects Increases Long Term Production

DENVER, CO - Newmont Corporation reported that it continued succeeding in striving for the full-year guidance of 6.0 million ounces of attributable gold production as well as 1.3 million gold equivalent ounce production from copper, silver, lead and zinc, in 2022. 2023 guidance is expected to exceed prior years with long term focus and strategy.

Newmont produced 1.49 million attributable ounces of gold and 299 thousand attributable gold equivalent ounces (GEO) from co-products; due to timing of shipments at Peñasquito, 38 thousand attributable gold ounces and 20 thousand GEOs of third quarter production.

The attributable gold production increased 3 percent to 1,487 thousand ounces from the prior year quarter primarily due to higher ore grade milled at Ahafo, Akyem and Boddington. A benefit is complete ownership of Yanacocha compared to the prior year. Increases were partially offset by lower production volumes from Nevada Gold Mines. The gold sales versus production was impacted by the timing of concentrate shipments at Peñasquito, partially due to inclement weather and earthquakes which impacted shipping logistics.

Tom Palmer, President and Chief Executive Officer, said, ""Newmont delivered solid production of 1.5 million gold ounces in the third quarter and continued the momentum for strong production. Supported by our clear long-term strategy, we continue to focus on safely delivering production through our



The Boddington gold and copper mine is one of Australia's largest producing mines located within the Saddleback greenstone belt in Western Australia. Photo: Newmont Corporation

responsibly managed portfolio of world-class assets, while investing in our future. We remain wellpositioned to respond to the challenging market environment that our industry faces."

Last November, the Company's Porcupine mine announced the state-of-the-art water treatment plant. Throughout 2021 and 2022, Newmont made a \$160 million investment into the new plant, which will benefit the entire ecosystem and surrounding watershed through the collection, treatment and return of impacted water. Provincially, this plant will have among the lowest effluent discharge limits within the mining sector. The investment demonstrates how industrial and environmental interests can be aligned, and is a strong example of Newmont's commitment to sustainable and responsible mining.

During operation the plant will return up to 13 million cubic meters of treated clean water to the Mattagami, Frederickhouse and Upper Kapuskasing watersheds. After more than a century of mining in Timmins, the next phase of operations at Porcupine is an opportunity to support regreening the region, significantly improve site water management and support the local watersheds while maintaining employment and economic benefits for Northern Ontario communities, local First Nations and the government.

Newmont's project pipeline supports stable production with improving margins and mine life. Newmont's 2022 and longer-term outlook included current development capital costs and production related to Tanami Expansion 2, Ahafo North, Yanacocha Sulfides, Pamour and Cerro Negro District Expansion 1.

The Tanami Expansion 2, located in Northern Territory, Australia, secures Tanami's future as a long-life, low-cost producer to extend mine life beyond 2040 through the addition of a 1,460 meter hoisting shaft and supporting infrastructure to process 3.3 million tonnes per year and provide a platform for future growth. The expansion is expected to increase average annual gold production by approximately 150,000 to 200,000 ounces per year for the first five years and reduce operating costs by approximately 10 percent. Commercial production for the project is expected to be in early 2025. Ahafo North, located northwest of Accra, Ghana, expands the Company's existing footprint in Ghana with four open pit mines and a stand-alone mill located approximately 30 kilometers from the Ahafo South operations. The project is expected to add between 275,000 and 325,000 ounces per year for the first five full years of production. Ahafo North is the best unmined gold deposit in West Africa with approximately 3.5 million ounces of Reserves and more than 1 million ounces of Measured, Indicated and Inferred Resources and significant upside potential to extend beyond Ahafo North's current 13-year mine life. Commercial production for the project is expected to be in mid-2025.

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## **Expansion To Double Concentrator Capacity At Bagdad Operation**

PHOENIX, AZ - Richard C. Adkerson, Chairman and Chief Executive Officer Of Freeport-McMoRan Inc. (FCX), said, "The Freeport team's performance in 2022 was solid. We achieved another year of growth in production volumes and enhanced our position as a leading producer of copper. I am particularly proud of the notable successful execution of our long-term projects in Indonesia and the significant accomplishments of our entire global team to address challenges faced by the global mining industry.

Our long-lived, large-scale and geographically diverse assets provide a solid foundation for the future production of metals required to support the global economy and the energy transition. Our plans focus on execution, building on our strong momentum and pursuing value responsibly and sustainably for the benefit of our stakeholders. FCX has significant mineral reserves, mineral resources and future development opportunities within its portfolio of mining assets.

FCX's preliminary estimated consolidated recoverable proven and probable mineral reserves from its mines at December 31, 2022, include 111.0 billion pounds of copper, 26.9 million ounces of gold and 3.53 billion pounds of molybdenum."

The Company's leaching innovation initiatives is advancing efforts to improve copper recovery from its leach processes, including initiatives across FCX's North America and South America operations to incorporate new applications, technologies and data analytics. FCX believes these leach innovation initiatives provide potential opportunities to produce incremental copper from its large existing leach stockpiles and lower-grade material current-

ly classified as waste. Initial results support the potential for incremental low-cost additions to the production and reserve profile and has identified opportunities to achieve an annual run rate of 200 million pounds of copper per year through these initiatives by the end of 2023.

The Company operates seven open-pit copper mines in North America - Morenci, Bagdad, Safford (including Lone Star), Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. In addition to copper, certain of these mines produce molybdenum concentrate, gold and silver. All of the North America mining operations are wholly owned, except for Morenci. FCX records its 72% undivided joint venture interest in Morenci using the proportionate consolidation method.

The Lone Star is increasing its operating rates to achieve targeted production of approximately 300 million pounds of copper per year from oxide ores in 2023 (compared with the initial design capacity of 200 million pounds of copper per year). The oxide project at Lone Star advances the opportunity for development of the underlying, large-scale sulfide resources. FCX is conducting follow-on exploration in the area to support metallurgical testing and mine development planning for a potential significant long-term investment to build additional scale on an economically attractive basis.

The Company is planning an expansion to double the concentrator capacity of the Bagdad operation in northwest Arizona. It is engaging stakeholders and is conducting a feasibility study, which is expected to be completed in 2023. FCX is advancing plans for expanded tailings infrastructure projects to support Bagdad's long-range plans. The timing of future development will be dependent on market conditions, labor and supply chain considerations and other economic factors.

In South America Mining, the Company operates two copper mines - Cerro Verde in Peru (in which FCX owns a 53.56% interest) and El Abra in Chile (in which FCX owns a 51% interest). In addition to copper, the Cerro Verde mine produces molybdenum concentrate and silver. Beginning in late 2022, heightened tensions, protests and social unrest emerged in Peru following a change in the country's political leadership. Demonstrations have continued in early 2023, and the civil unrest continues to disrupt commerce and supply chains in Peru. To date, there has been limited impact on Cerro Verde's operations. The Company continues to monitor the situation with a priority on safety and security. A prolonged disruption of logistics and supply chains could impact future operations.

There has been increased operating rates at Cerro Verde and higher mining and stacking activities at El Abra resulted in a 12% increase in copper production from South America mining for the year 2022, compared with the year 2021 (which was impacted by COVID-19 protocols). El Abra's large sulfide resource supports a potential major mill project similar to the large-scale concentrator constructed at Cerro Verde in 2015. Technical and economic studies continue to be evaluated to determine the optimal scope and timing for the sulfide project.

The Company is advancing plans to invest in water infrastructure to provide options to extend existing operations, while continuing to monitor potential changes in Chile's regulatory and fiscal matters.

PT-FI operates one of the world's largest copper and gold mines at the Grasberg minerals district in Central Papua, Indonesia. PT-FI produces copper concentrate that contains significant quantities of gold and silver. FCX has a 48.76% ownership interest in PT-FI and manages its mining operations.

Under the terms of agreements entered into in 2018, FCX's economic interest in PT-FI approximated 81% through 2022, and beginning in January 2023, FCX's economic interest in PT-FI is 48.76%. This arrangement was developed to replicate the economics of PT-FI's former joint venture partner interests, which were acquired by the Indonesia government in 2018.

PT-FI currently has three underground operating mines in the Grasberg minerals district: Grasberg Block Cave, Deep Mill Level Zone (DMLZ) and Big Gossan. The milling rates for ore extracted from its underground mines averaged 198,100 metric tons of ore per day in fourth-quarter 2022.

The installation of additional milling facilities at PT-FI is currently expected to be completed in Continued On Page 22



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## **WYOMING Drilling Program Confirms Orogenic Gold Structure At Golden Buffalo Project**

VANCOUVER - Relevant Gold Corp. reported on the initial 3,500m drilling exploration program on its Golden Buffalo Project, located in the in the South Pass Gold Field, Wyoming. Highlights of the program include 1 metre (core length) of 83.8 g/ton Au in Hole 22GB-012 and 14 of 26 holes reporting anomalous gold (>0.1 g/ton Au). The results indicate that the Golden Buffalo Shear is a fertile orogenic gold structure and provides initial proof of concept that large scale Abitibi-style mineralization may exist in central Wyoming.

The holes are from the 2022 Golden Buffalo exploration program which are the first efforts to identify district-scale orogenic gold opportunities in the long underexplored central Wyoming Gold Belt. High-grade gold has long been known from the region, but only recently have a series of major Archean shear zones been recognized as hosting this gold. This indicates modern exploration concepts of "orogenic gold", such as those developed in the prolific Canadian Abitibi Gold Belt (>200 million ounces of gold production) can be applied in the region. Importantly, recent plate tectonic studies suggest that Wyoming was connected to the Abitibi Gold Belt at the time of mineralization and was later rifted apart to its present position. This increases the potential that the multiple shears identified to date in the Company's 15,095 hectare land package should have excellent potential for a major gold discovery. These shears are being systematically mapped and sampled, with initial results expected soon.

"These exciting results confirm gold mineralization and Abitibi-style alteration are indeed associated with largescale shear structures cutting the property. The high-grade gold in 22GB-012 proves that gold mineralization continues to depth, confirming that our Abitibi-style gold mineralization model is appropriate for the project," said Robert Bergmann, CEO. "We are excited with these results and look forward to combining them with our regional mapping and sampling to target the multiple Golden Buffalo-style shear zones we've mapped traversing the claim package. We anticipate drilling some of these shears in our 2023 work program."

#### WASHINGTON

## **Consistent Gold Grades At Golden Eagle Project**

VANCOUVER - Calibre Mining Corp. reported on the first phase diamond drill program at the Golden Eagle Project located in the Republic/Eureka Mining District in Ferry County, Washington. Golden Eagle hosts a pit constrained, Measured and Indicated resource of 2.02 million ounces at 1.4g/t gold with an Inferred resource of 155,000 ounces at 0.9g/t gold.

Initial drill results from the Golden Eagle program include: 4.30 g/t Au over 92.42 metres including 7.80 g/t Au over 17.3 metres in Hole GEC22-001; 2.90 g/t Au over 195.1 metres in Hole GEC22-003; and 2.38 g/t Au over 114.3 metres; 2.66 g/t Au over 19.8 metres and 2.65 g/t Au over 25.7 metres in Hole GEC22-

"The results from Golden Eagle reinforce the potential for this project to provide significant value to Calibre shareholders. The first phase of this drill program confirms a robust mineral system with consistent gold grades over broad widths. The Golden Eagle Project is a key asset within our United States operating platform which includes the Pan mine and the Gold Rock and Illipah projects in Nevada. I look forward to results from the second phase of drilling as well as the commencement of a comprehensive metallurgical program to fully assess this strategic assets' potential. Golden Eagle is a meaningful contributor to the Company's overall mineral resource estimate with 2.0 million ounces in Measured and Indicated Mineral Resource, adding positively to our organic growth strategy."

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Darren Hall, President, and Chief Executive Officer, said,

Chairman & CEO: Don E. Howell (April 6, 1939 - April 27, 2021) President & COO: Dale P. Howell Editor: Don Harrison, editor@miningrecord.com Accounting HQ: accounting@miningrecord.com General Manager HQ: customerservice@miningrecord.com Subscriptions/Orders: subscriptions@miningrecord.com Advertising: advertising@miningrecord.com

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## Nevada Continued Exploration Success At The Marigold Mine

DENVER, CO - SSR Mining Inc. reported on the 316 drill holes completed at the Marigold mine in Nevada, at the New Millennium, Trenton Canyon and Buffalo Valley oxide targets. These results build upon, and are subsequent to, the Marigold 2021 Technical Report Summary. With an existing Mineral Reserve life of 11 years, exploration at Marigold is focused on adding higher-grade oxide ounces to the mine plan to both enhance and extend the current production profile and life of mine free cash flow generation. The continued exploration success at these key exploration targets has the potential to drive Mineral Reserve and Mineral Resource growth that can be incorporated into an updated Technical Report Summary for Marigold, which is expected in 2023 (the "2023 Marigold TRS"). The 2023 Marigold TRS will evaluate the potential to add New Millennium to the life of mine plan. Future studies will evaluate mining and processing opportunities at the Trenton Canyon and Buffalo Valley satellite targets located four and ten kilometers south of New Millennium, respectively.

The potential development of New Millennium was unlocked by recent brownfield strategic land acquisitions and presents an opportunity to add higher-grade oxide Mineral Reserves and Mineral Resources proximal to existing Marigold infrastructure. The New Millennium target area is comprised of six distinct zones which include East Basalt, Battle Cry, Antler, Section 6, Lil' Gun and North Antler. These targets are on the periphery of the Antler-Basalt pits that previously produced approximately one million ounces at a grade of 0.75 g/t. Nearly 45,000 meters of drilling was completed at New Millennium across 146 holes, with numerous intercepts significantly above Marigold's existing Mineral Reserve grade and new mineralization encountered more than five hundred meters south of previously defined Mineral Resources.

New Millennium oxide drilling highlights include: MRA7621: 25.9 meters at 4.2 g/t Au from 117.3 meters; MRA7623: 16.8



meters at 2.7 g/t Au from 120.4 meters; MRA7629: 22.9 meters at 1.7 g/t Au from 231.6 meters; and MRA7520: 21.3 meters at 1.7 g/t Au from 195.1 meters, and 19.8 meters at 1.9 g/t Au from 225.6 meters.

Rod Antal, President and CEO, said, "These results showcase exceptional oxide grades that have potential to drive Mineral Reserve and Mineral Resource growth and complement the existing Marigold production profile.

We expect to include some of this higher-grade oxide material in the 2023 Marigold TRS, which we anticipate will demonstrate an optimized and expanded production profile through the incorporation of New Millennium. In addition, with the recent results from both Trenton Canyon and Buffalo Valley, we believe the future is very bright for Marigold with opportunities to extend the existing 11 year mine life while adding higher grade, lower cost oxide ounces to the near and longerterm mine plan."

In addition to drilling at New Millennium, SSR Mining continues to explore for supplemental oxide ore sources across the broader Marigold land package. At Trenton Canyon and Buffalo Valley, located approximately four kilometers south and ten kilometers southwest of New Millennium, respectively, drilling has delivered exciting high-grade intercepts of predominantly oxide mineralization. Exploration at these targets aims to define oxide material that leverages existing infrastructure at Marigold to provide an avenue for production growth in the future. Work also continues to delineate and define initial sulfide resources at each target that could represent potential longer-term development opportunities for Marigold.

While the exploration focus is to define and expand oxide inventory across the greater Marigold property, SSR Mining is simultaneously exploring for structurally controlled sulfide mineralization potentially amenable to alternative mining & processing methods than those currently utilized at Marigold. Building on results previously announced in December 2021, exploration efforts at Trenton Canyon have focused on the Tempest zone, a series of high-grade structures proximal to the past-producing South and West pits.

As the exploration team furthers its understanding of sulfide mineralization at Marigold, it is applying this knowledge to a robust collection of high-quality and underexplored targets throughout the extensive Trenton Canyon and Buffalo Valley properties. One example is the Spitfire target, located approximately two kilometers northwest of the Buffalo Valley pit.

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Results of the field program exceeded expectations, with all the drill holes intersecting the Niagara and Congress Veins extensions on the property and yielded several noteworthy gold intercepts and long intervals of strong gold enrichment.

The highest gold intercepted in phase one, 2022 drilling campaign: CCG-004 14.9 g/t over 1.5 meters, as part of a larger intercept of 3.5 g/t over 10.7 meters; and CCG-004 9.3 g/t over 3 meters.

Three distinct areas of gold potential have been identified, two of which were revealed by previous drilling and one is newly discovered, and named for convenience, Congress z1, z2 and z3, respectively. The results demonstrate significant exploration potential of the property.

Casa's diamond drilling program tested possible extensions of the Congress and Niagara vein structures and nearby areas.

The Company's address is 470 Granville St., Suite 822 Vancouver, BC V6C 1V5.

#### CONTINUED FROM PAGE 1 Newmont Corporation . . .

The Yanacocha Sulfides 11, northeast of Lima, Peru, will develop the first phase of sulfide deposits and an integrated processing circuit, including an autoclave to produce 45% gold, 45% copper and 10% silver. The project economics, timing and optionality are currently being evaluated by management, and remain subject to an investment decision.

The first phase focuses on developing the Yanacocha Verde and Chaquicocha deposits to extend Yanacocha's operations beyond 2040 with second and third phases having the potential to extend life for multiple decades.

Pamour, in Timmins, Ontario, extends the life of Porcupine and maintains production beginning in 2024. The project will optimize mill capacity, adding volume and supporting high grade ore from Borden and Hoyle Pond, while supporting further exploration in a highly prospective and proven mining district.

Cerro Negro District Ex-pansion 1, located in Argentina, includes the simultaneous devel-



opment of the Marianas and Eastern districts to extend the mine life of Cerro Negro beyond 2030. The project is expected to improve production to above 350,000 ounces beginning in 2024.

For the 15th year in a row, Newmont Corporation joins the Dow Jones Sustainability<sup>™</sup> World Index (DJSI World), representing the top 10% of the largest 2,500 companies in the S&P Global Broad Market Index. DJSI World membership is based on long-term economic factors, as well as leading environmental, social and governance (ESG) performance evaluated through the 2022 S&P Global Corporate Sustainability Assessment (CSA).

In addition to being ranked number one in the Metals and Mining Industry, Newmont received the top score for the Governance and Environment dimensions and earned top decile performance in 23 of the 25 CSA performance categories. The ranking is based upon Newmont's performance in calendar year 2022. As of December 9, 2022, the company achieved the highest score out of 147 metals and mining companies assessed in the CSA.

"At Newmont, our unwavering commitment to leading ESG practices is woven into the fabric of our company and fundamental to the way in which we operate," said Palmer. "We are honored to be the metals and mining leader on the DJSI World Index and remain focused on our purpose to create value and improve lives

through sustainable and responsi-

ble mining."

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Newmont is the world's leading gold company and a producer of copper, silver, zinc and lead. The Company's world-class portfolio of assets, prospects and talent is anchored in favorable mining jurisdictions in North America, South America, Aus-tralia and Africa. The Company is an industry leader in value creation, supported by robust safety standards, superior execution and technical expertise. Newmont was founded in 1921 and has been publicly traded since 1925.

The company's address is 6900 E Layton Avenue, Suite 700, Denver, CO 80237, (303) 863-7414, fax: (303) 837-5837, email: investor.relations@newmont.com, website: www.newmont.com.

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#### IDAHO Black Pine Project Reports Indicated Ounces Increase

VANCOUVER - Liberty Gold Corp. reported on the independent Mineral Resource Estimate (MRE) at its Black Pine Oxide Gold Project in southeastern Idaho. The updated Resource builds on the prior maiden resource, and includes an additional 528 Reverse Circulation (RC) and core holes (126,726 metres) drilled by Liberty Gold between April 2021 and October 2022.

The MRE is reported using a constraining resource pit at a cutoff grade (COG) of 0.20 grams per tonne (g/t) gold (Au) and consists of: An indicated resource of 2,613,000 ounces of oxide gold at an average grade of 0.52 g/t Au and totalling 157,267,000 tonnes (t); and An inferred resource of 483,000 ounces of oxide gold at an average grade of 0.43 g/t Au and totalling 35,150,000 t. A highgrade subset of the MRE within the 0.20 g/t Au resource pit using a COG of 0.50 g/t Au consists of: An indicated 1,548,000 ounces of gold at an average grade of 1.02 g/t Au and totalling 47,391,000 t; and An inferred 219,000 ounces of gold at average grade of 0.93 g/t Au and totalling 7,315,000 t.

In total, using the same COG as the previous resource estimate, the updated MRE represents a 52% increase in indicated ounces and a 31% increase in inferred ounces over the maiden resource released just 18 months ago. Within the higher-grade subset (0.50 g/t Au COG within the 0.20 g/t Au resource pit), 528,000 indicated ounces were added relative

to the 2021 maiden resource estimate, a 52% increase. The significant increase in ounces can be attributed to: The discovery and subsequent intensive drilling of 154 holes included in the resource in the Rangefront Zone beginning in July 2021 over a 15 month period; Expansion and/or amalgamation of several existing zones, including the CDF, E, and M zones and discovery of the Bobcat Zone, a southern extension of the CDF Zone; Drill testing and drill definition of surficial waste rock storage and pit backfill; and Definition drilling in previouslydefined areas of inferred mineralization.

Jason Attew, President and CEO, said, "This updated Mineral Resource Estimate for our flagship Black Pine project represents a major milestone and a major accomplishment for our exploration team, who spent the last year and a half with a singular focus on expanding and upgrading the resource endowment at Black Pine. The team has delivered impressive results. Compared to the July 2021 resource estimate, tonnes are up significantly while grade has improved using conservative input assumptions, positioning Black Pine in the rarified territory of an oxide resource with more than 2.6 million indicated ounces and a further half a million ounces inferred. Moreover, we are encouraged that Black Pine continues to expand in all directions with future resource growth expected as drill results continue to impress."

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### IDAHO Agreement Positions Lucky Friday For Continued Successful Growth

COEUR D'ALENE, ID -Hecla Mining Company announced that the United Steelworkers (USW) Union Local 5114 has ratified the Collective Bargaining Agreement at the Company's Lucky Friday Mine, located in Mullan, Idaho.

The USW Local 5114 and the Company have agreed to a 6-year contract. The work rules were largely unchanged from the prior agreement. Wages are increased to reflect recent inflationary pressures and to maintain Lucky Friday's competitiveness in a tight labor market.

"With the ratification of this 6year agreement, Lucky Friday is positioned for continued successful growth well into the future". said Phillips S. Baker, Jr., President & CEO. "The agreement shows the strong working relationship with the USW Local 5114 and gives both the work force and Hecla stability. With 2022's 24% increase in silver production over 2021 and the expected further growth in the coming years, we believe this decade will be the best in the mine's 80-year history."

In the fourth quarter silver production of 14.2 million ounces is the Company's second highest, an increase of 10% over last year driven by a 24% increase at Lucky Friday and a 5% increase at Greens Creek. As expected, gold production decreased 13% to 175,807 ounces as Nevada production ended. There was a 12% increase in lead production, and zinc production unchanged from 2021.

Baker said, "Hecla is the fastest growing silver producer with a 40% increase in production since 2018. This sustainable growth is due to the continued strong performance of Greens Creek and dramatically higher production from Lucky Friday. Greens Creek had record throughput in the fourth quarter and Lucky Friday's production was driven by higher grades and the innovative Underhand Closed Bench mining method.

In 2023, with Keno Hill expected to produce more than 2.5 million ounces of silver, Hecla could achieve as much as 17 million ounces of silver production, which reaches our production goal a year earlier than planned and would make Hecla the largest silver producer not only in the United States but also in Canada. With silver's growing use in the solar industry and the focus on clean and green energy, this is an exciting time to be the leading silver producer in the world's best jurisdictions.'

The Greens Creek mine produced 9.7 million ounces of silver and 48,217 ounces of gold in 2022. Fourth quarter production was 2.4 million ounces of silver and 12,990 ounces of gold. The mill achieved a new throughput record of 2,502 tpd in the fourth quarter. Annual silver and gold production increased by approximately 5% over 2021 due to increased mill throughput. Fourth quarter silver production was in line with the third quarter of 2022 while gold production increased by 14% due to higher milled grades. For the year, the mill operated at an average of 2,415 tpd in 2022.

At the Lucky Friday Mine, 4.4 million and 1.2 million ounces of silver were produced in 2022 and the fourth quarter, respectively. Silver production increase of 24% year over year was attributable to an 11% increase in mill throughput and 12% higher grades. Silver production increased 14% in the fourth quarter compared to the third quarter of 2022 due to higher grades. The mine achieved multiple milestones in 2022 with record mined tons, and record mill throughput of 978 tpd in the mine's 80-year history.

The Casa Berardi mine produced 127,590 and 30,709 ounces of gold in 2022 and the fourth quarter, respectively. Gold production declined by 5% over the prior year due to lower grades as ore sourced from the pits accounted for a higher percentage of the mill feed, partially offset by higher throughput and recoveries. Fourth quarter gold production was 8% lower compared to the third quarter of 2022 due to lower milled grades. The mill operated at an average of 4,353 tpd in 2022, an increase of 4% over the prior year, and achieved yet another throughput record of 4,468 tpd in the fourth quarter of 2022.

At the Keno Hill mine, development remains on schedule and the mine is expected to commence production in the third quarter of 2023 with a phased ramp up projected to reach 440 tpd by the end of the year. Ramp-up and development costs from January 2023 until full production is achieved forecasted at \$35-\$40 million. 2023 silver production is forecast to be more than 2.5 million ounces, expected from Bermingham and Flame & Moth deposits.



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# **Kinross' Operations Increased Production Driven By**

TORONTO - Kinross Gold Corporation, President and CEO, J. Paul Rollinson, said, "We are excited about our pipeline of development and exploration projects, which all made strong progress during the third quarter. At the world-class Great Bear project, drilling results continue to fulfill our expectations, including high-grade intercepts at depth, and we are on track to declare an initial mineral resource early 2023.

We have returned approximately \$300 million of capital to shareholders during the third quarter and returned a total of approximately \$450 million by the end of 2022 through our share repurchase and dividend programs. Since launching our enhanced share buyback program last September, we have spent \$180 million, effectively repurchasing for cancellation the shares that were issued as part of the Great Bear transaction while maintaining our quarterly dividend and investment-grade balance sheet.

The Company continued to advance ESG goals. On climate change and emissions reductions, we have completed an analysis of climate-related scenarios and their potential impacts on our future business, advanced our pipeline of energy-efficiency projects, and entered into strategic partnerships with various technology providers, suppliers and electric utilities."

As previously reported, operations increased production and lowered costs, primarily driven by higher grades at Paracatu, enhanced seasonal recoveries from our U.S.-based heap leaches, and the ramp-up at La Coipa, which progressed well and is expected to continue trending upwards with the mill averaging throughput levels of approximately 9,500 tonnes per day.

In January of this year, Kinross acquired deemed beneficial ownership of 5,018,017 common shares of Allegiant Gold Ltd. issuable upon exercise of common share purchase warrants previously acquired by Kinross. The warrants were acquired as part of the announced investment in Allegiant completed March 17, 2022.

Pursuant to the investment, Kinross purchased 10,036,034 units of Allegiant, representing 9.9% of the issued and outstanding shares of Allegiant. Each unit

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was comprised of one common share and one-half of one common share purchase warrant (each, a "Unit", and collectively, the "Units"). The Units were acquired for a purchase price of \$0.40 per Unit, representing an aggregate purchase price of \$4,014,414.00. The common shares held represent approximately 9.8% of the currently issued and outstanding Allegiant common shares and the Warrants provide deemed beneficial ownership of common shares representing approximately 4.7% of the currently issued and outstanding Allegiant common shares. Kinross is the deemed beneficial owner of common shares representing approximately 14.0% of the issued and outstanding shares of Allegiant and is therefore required by applicable Canadian securities laws to issue a release and file a corresponding early warning report.

Kinross acquired the Units as part of a strategic investment in the Issuer. Kinross may or may not purchase or sell securities of the Issuer in the future on the open market or in private transactions, depending on market conditions and other factors. Kinross currently has no other plans or intentions that relate to its investment in the Issuer. Depending on market conditions, general economic and industry conditions, the Issuer's business and financial condition and/or other relevant factors, Kinross may develop other plans or intentions in the future.

Kinross previously reported that it will proceed with development of the 70%-owned Manh Choh project in Alaska. The project is expected to increase the Company's production profile in Alaska by a total of approximately 640,000 attributable Au eq. oz. over the life of mine at lower costs. Initial production from Manh Choh is expected in the second half of 2024.

Early works at Manh Choh are focused on camp and initial road access, which are proceeding on schedule and on budget. At Fort Knox foundation work for the processing infrastructure upgrades are underway. Permitting is progressing well and the Company received its wetland permit in the third quarter. Procurement and contracting activities are advancing well, prioritizing local employment and contracting, including with the Native Village of Tetlin.

At Lobo-Marte, the company continued to advance permitting



activities at in order to preserve its optionality for Kinross' longterm portfolio. Continuing to study opportunities to extend La Coipa's mine life up to the end of the decade, with the potential additions of a new Puren pushback, as well as the adjacent Coipa Norte and Can-Can pushbacks. Those extensions would enter into the regular permitting cycle in the upcoming years. As a result, the Company has decided to defer submission of the Lobo-Marte Environmental Impact Assessment (EIA), as the content of that application will depend, in part, on the extent of any mine life extensions at La Coipa and other factors such as gold price, local permitting process, and other economic considerations. The Company continues to believe in the project's long-term development potential as a large, low-cost mine



# **Higher Grades And Enhanced Seasonal Recoveries**

upon the conclusion of mining at La Coipa.

The exploration project Curlew, in Washington State, located approximately 35 kilometres north of the Company's Kettle River mill by paved road, drilling from underground has confirmed the understanding of mineralized vein orientations. The Company is on schedule to declare a mineral resource in early 2023 with the drilling information to date. Underground exploration drilling is still underway and is continuing this year after which an updated resource will be presented at a later date as the project is expected to grow beyond the year-end resource.

The Gold Hill exploration project, located approximately seven kilometres northeast of Round Mountain in Nevada, exploration drilling continued in 2022 to return encouraging results. Drilling at the main zone (extension of the Gold Hill pit) has confirmed multiple >150m strike and dip extensions of the primary vein and parallel vein structures. Drilling along the parallel Alexandria vein (600m south of Main) has also returned encouraging results such as D-1176 – 1.9m @ 24.24g/t Au (Incl. 0.4m @ 107g/t Au), as well as visible gold in veins beneath the sinter. Gold Hill is a low sulfidation epithermal vein system consisting of high-grade narrow quartz veins

with significant strike continuity. Historic underground mining (current pit area) produced approximately 40koz with a grade of 10g/t Au. Exploration focused on testing the strike and dip limits of Main and Alexandria, both of which remain open along strike. Exploration continued these efforts, as well as test for parallel veins outside of the two primary zones.

Last August, the Company completed the sale of all its interest in the Chirano mine in Ghana to Asante Gold Corporation for total consideration of \$225 million in cash and shares. Kinross received \$60 million in cash and approximately 35 million Asante common shares upon close, with the remainder in deferred payments.

Since completing the Chirano divestment, as well as completing the divestment of the Company's assets in Russia, Kinross adjusted its regional head office presence to be more in line with its Americas-focused portfolio.

Following the publication of Kinross' 2021 Sustainability and Climate reports in Q1 and Q2 respectively, the Company updated its contributions towards the Sustainable Development Goals developed by the United Nations as important societal goals, including a summary of results at the Chirano mine in Ghana, which was sold during the quarter.

In Mauritania, severe flooding

in the Inchiri region in last September affected local cities and communities around the Tasiast mine, including the regional hospital.

Kinross provided significant and timely humanitarian relief including food and supplies, as well as the delivery of a container of medical supplies and equipment through a partnership with health NGO, Project C.U.R.E., with a value of approximately \$450,000.

Advancing the climate change strategy, Kinross completed an

analysis of climate-related scenarios, following the governance recommendations of the Task Force on Climate-related Financial Disclosures. The Company also continued to advance its pipeline of energy efficiency projects, as well as strategic partnerships with various technology providers, Original Equipment Manufacturers and electric utilities.

The Company has continued to improve our governance climate change risks and opportunities by embedding the forecasting of emissions directly into the life of mine models of each of its assets and projects.

Kinross' strong ESG performance was externally-recognized in major ESG rankings and ratings. The Company's S&P Global ESG score increased three points in 2022, ranking in the 96th percentile, the Company's highest score since 2014, which was driven primarily by improved scores in the Environment dimension. The Company's Sustainalytics risk rating improved to medium from high and its MSCI score was maintained at "A."



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# High-Grade Samples From The Montana Madison Cu-Au Project

VANCOUVER - American Pacific Mining Corp reported high-grade gold (Au) and copper (Cu) rock chip samples from a program conducted by Kennecott Exploration, a division of the Rio Tinto Group, at the Madison Copper-Gold Project in Montana. A total of 73 rock chip samples were collected from 5 specific exploration targets: the Archean Section, America Pit; Devonian Jefferson Dolomite; Hudson Mine; and Western Skarn Contact, each of which contained high-grade samples.

Highlighted Sample Results: 1) 40485321: 9.93 g/t Au; 3.40 g/t silver ("Ag"); 0.08% Cu. 2) 40485246: 13.30 g/t Au; 7.83 g/t Ag; 0.04% Cu. 3) 40485201: 12.35 g/t Au; 5.76 g/t Ag; 0.01% Cu. 4) 40485221: 32.40 g/t Au; 39.60 g/t Ag; 0.02% Cu. 5) 40485233: 0.13 g/t Au; 1.49 g/t Ag; 0.26% Cu. 6) 40485284: 7.36 g/t Au; 38 g/t Ag; 6.90% Cu.

"American Pacific is particularly encouraged by the highgrade gold values obtained from this program which confirm a large mineralized system," said President, Eric Saderholm. "Surface gold and copper mineralization occurrences within this system have been identified over an 11 square kilometre area. A major thrust fault zone, the Silver Star Fault, dissects the property placing older Precambrian rocks

against and above the favourable Paleozoic carbonates and the Radar Creek intrusive complex, the probable source of the Madison mineralization. The Silver Star Fault system appears to be related to a deep crustal fault zone that connects to the Butte porphyry deposits located 38 kilometres to the northwest. All five targets present significant exploration possibilities within the district. The Archean target is virtually untested and is of particular interest to our geologists due to the pronounced geophysical anomalies and the coincident historic gold values of up to 48.5 grams per tonne."

Seventeen samples were collected in the Archean Section, primarily in and around historic prospect pits. Several quartz and carbonate veins were sampled. The quartz veins located within the Archean section are steeply dipping and generally trend eastwest. Three samples were collected on a ridge north by northwest of the American Pit. The American Pit was mined in the 1970s by open-cut mining methods along the Rader Creek-Madison Limestone contact. The American Pit marks the surface expression of the Madison Skarn deposit. Mineralized endo-skarn of the Rader Creek granodiorite hosts the deposit. High-grade quartz sulfide veins are found outside the pit boundary.

Rio Tinto has conducted several successful sampling programs in the American Pit area, with results ranging from 0.25 g/t Au to 124.50 g/t Au. Copper values have ranged from 0.006% Cu to 0.264% Cu. Twenty-nine rock samples were collected along the footwall of the Silver Star Fault within the Devonian Jefferson Dolomite. These samples were collected from several historic prospect pits and scattered outcrops. The Jefferson in this area shows strong limonite-jasperoid vein and veinlet mineralization, and high-grade Au values track with the jasperoids.

The Jefferson Dolomite can be a great host rock due to contained relic hydrocarbon content mixing with metalrich hydrothermal fluids. Fifteen samples were collected in and around the Hudson Mine workings. The Hudson Mine was a past producer of highgrade Au-Cu skarn mineralization hosted in the Rader Creek granodiorite-Madison limestone contact. Six samples were collected along the western edge of the Madison Skarn. Here the sediments form a thin skin covering the granodiorite-sediment contact with widespread hornfels and scattered structurally controlled skarn occurrences. Numerous historic prospects can be found on these structural skarn zones.

#### New Mexico Drilling Identifies High-Grade Ag-Au At The Mogollon Project

VANCOUVER - Galen Mc-Namara, CEO Of Summa Silver Corp. reported that, "Ten of eleven holes drilled at Mogollon have now intersected strongly mineralized zones of silver and gold. With a view towards building a long-term presence, we look forward to continuing to explore in this part of New Mexico."

The focus of the ongoing three-rig drill program is testing extensions of mineralization around the Consolidated Mine, centered on the north-trending Queen Vein.

MOG22-10 represents the southernmost hole drilled by the Company on the Queen Vein and is a 50 m step-out from MOG22-01. The hole intersected two intervals of quartz-rich veins and breccias; the upper interval (e.g., 420 g/t silver equivalent over 1.2 m at 259.8 m) is interpreted to represent a secondary cross-cutting vein, whereas the lower interval (e.g., 445 g/t silver equivalent over 16.6 m) is interpreted to represent the Queen Vein. The hole successfully extended Queen Vein mineralization south of MOG22-04 (429 g/t silver equivalent over 11.6 m) where it is currently being tested for further expansion.

Holes MOG22-08 and -11 were drilled north of the Consolidated Mine and were designed to step-out from MOG22-05 (31.0 m at 448 g/t silver equivalent). MOG22-08 intersected the Queen

Vein approximately 80 m downdip from MOG22-05 and MOG-22-11 intersected the Queen Vein approximately 65 m along strike and to the north from MOG22-05. MOG22-08 returned an interval of 339 g/t silver equivalent over 17.8 m including 1,233 g/t silver equivalent over 2.0 m associated within a broad and complex zone of calcite-quartz veins, quartz-rich breccias with veinlets of bladed quartz and colloform banding. MOG22-011 intersected over 44 m of epithermal-related vein material with local zones of strong silver and gold mineralization (160 g/t silver equivalent over 10.9 m including 456 g/t silver equivalent over 0.6 m). Together with results from MOG22-05, both holes demonstrate the significant potential of the Queen Vein north of Consolidated mine where currently drilling is focused.

Holes MOG22-07 and -09 tested for the down-dip extension of mineralization below the Consolidated Mine. MOG22-07 yielded an interval of 159 g/t silver equivalent over 7.9 m including 247 g/t silver equivalent over 2.1 m associated with quartz-rich breccias and banded quartz-calcite veins which suggest the vein-system continues below the lowest level of historic development. MOG22-09 was drilled below MOG22-07 and intersected a section of unmineralized Queen Vein.

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# Successful Advancement At The TK Cu-Au-Ag-Mo Porphyry Project

VANCOUVER - BCM Resources Corp (B) reported on the advances at the exploration drilling program at Thompson Knolls (TK) greenfield Cu-Au-Ag-Mo porphyry system in southwestern Utah. Diamond drilling is successfully advancing drill testing of the deep porphyry and skarn targets. The greenfield TK Cu-Au-Ag-Mo porphyry project is accessed by a highway and then by a network of gravel roads.

President, Sergei Diakov, said, "We continue advancing our Phase 3 drilling program with two drill holes recently completed and a third hole in progress. Drilling intercepted mineralization in the porphyry intrusion and surrounding skarns beneath the post-mineral cover. A significant skarn intercept in hole TK8, with a strong presence of sulfide mineralization, is very encouraging. We are looking forward to potentially exciting results from this drilling program."

TK8 drill hole (completed, but failed to reach target depth). This hole was vertical (90 degrees) and located on the mineralized trend from drill holes TK1, TK3a & TK5. Hole TK8 had a projected target depth of 4,000 ft (1,220m). The drill hole crossed a 1,484 ftthick (452 m) post-mineral fanglomerate cover and then encoun-

tered a package of limestones, mudstones, and sandstones. Significantly, the limestones contain a well-developed diopsidemarble skarn. The upper parts of this skarn are oxidized, then farther into the skarn drilling encountered a very intense sulfide-rich magnetite breccia in skarns stretching for over a 1,021.5 ft (313 m) interval. Locally, sulfide mineralization consists of pyrite (avg 10%)-pyrrhotite (avg 8%)chalcopyrite (avg 5%) and is developed as clots/patches within massive magnetite breccias and in halos as disseminated mineralization. Unfortunately, after encountering a fault zone at depth of 3,021.5 ft (921 m) drillers lost the hole. The bottom of the hole was still in good skarn mineralization with its extension remaining open in all directions. The contact between the skarn and porphyry intrusion has not been tested and remains a compelling target.

TK7 drill hole was also drilled vertically (90 degrees) through a 1,250 ft thick (381 m) post-mineral cover unit of semi-consolidated fanglomerates with numerous sandy horizons, which presented a significant drilling challenge. Below the fanglomerates, drilling intersected mineralized quartzmonzonite porphyry (QMP) intrusion until the end of the hole. The QMP unit has three alteration types: i) illite-chlorite (propylitic); ii) quartz-sericite-pyritic (QSP) alteration (phyllic), and; iii) patchy biotite-K feldspar (potassic). Mineralization is documented as poorly mineralized quartzpyrite-chalcopyrite stockwork veining and disseminated mineralization.

Drilling of TK7 was stopped in a fault zone at depth of 2,641 ft (804.98 m). The Company is currently advancing TK9 drill hole, which is expected to test the possible eastern extension of wellmineralized skarn at TK6. Drill core with mineralization is being cut by a diamond saw and sample preparation for the mineralized intervals is underway.

The Company is planning to expand the scope of its exploration program at TK in 2023. To accommodate this larger program, we have prepared a Plan of Operation (PoO) and submitted the proposal to Utah BLM and the Utah Division of Oil, Gas, and Mining for their review and approval. The proposal was accepted by both the Utah government and BLM agencies.

Approval of the Plan will allow the Company to significantly increase exploration drilling testing of the northern and southern portions of the TK property.

#### NORTHERN NEVADA Phase One Exploration Drill Program At The Hycroft Mine

WINNEMUCCA. NV Hycroft Mining Holding Corporation (HYMC) that owns the Hycroft Mine in Northern Nevada, reported on the Phase 1 of its 2022-2023 exploration drill program. Core drilling results are still pending. These drilling results and previously reported drilling results are achieving the objectives of the 2022-2023 exploration drill program. The drill program is designed to improve the understanding of the higher-grade intercepts, better understand the mineralization controls, and test exploration targets outside the currently known resource. Through this work the Company hopes to develop opportunities to mine highergrade ore early in the mine plan enhancing the project's economics.

Alex Davidson, Vice President of Exploration, said, "We continue to receive exciting results from Phase 1 of the drill program with respect to the higher-grade opportunities within the Brimstone, Vortex, and Central zones.

Drill hole H22R-5679, intercepted 29 meters of significant gold and silver mineralization east of the East Fault which was previously considered to be the bounding limit of Brimstone mineralization. Mineralization was intersected approximately 150 meters beyond the current resource opening a new target area for near-mine exploration. In the Vortex zone we are very excited with the results from drill hole H22R-5700 which includes several higher-grade intercepts of gold and very high-grade silver. Importantly, the intercepts from this hole tie together the highgrade intercepts from the drilling previously reported in late 2022. Drilling in both the Camel and Central zones delivered great results as we were able to convert material previously modeled as waste into mineralization. Several holes in these zones upgraded resource classification from inferred to indicated. These upgrades will improve the economics of these zones."

The 2022–2023 exploration drill program at the Hycroft Mine comprises approximately 30,000 meters of RC drilling and approximately 7,500 meters of core drilling. Phase 1 drilling was completed in December 2022 with remaining assay rsults expected by the end of this month.

The Company anticipates receiving the new drill rigs and initiating Phase 2 drilling early in the second quarter of 2023.

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# **Confirmation Of Mineralization Extends Hotspot Zone**

VANCOUVER - Walker River Resources Corp. reported on the late 2022 reverse circulation (RC) drill program at the Lapon Gold Project located approximately 60 kilometres southeast of Yerington, Nevada. Drilling continues to confirm mineralization at Lapon Canyon and extend the Hotspot

zone. At total of ten (10) holes were drilled here, including seven (7) at the new Hotspot zone, discovered during 2022.

RC Drill hole LC 22-92 returned 1.65 g/t Au over 97.6 meters at a depth of 24.4 meters including 26.95 g/t Au over 3 meters from a depth of 57.9



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meters. RC Drill hole LC 22-94 returned 1.10 g/t Au over 73.2 meters at a depth of 32 meters. RC Drill hole LC 22-93 returned 1.25 g/t Au over 24.4 meters at a depth of 39.6 meters. RC Drill hole LC 22-91 returned 1.05 g/t Au over 35.5 meters at a depth of 27.4 meters

The drilling has extended the Hotspot zone along strike (laterally), depth and width. Robust nature and continuity of the gold mineralized alteration zone is evidenced by the length of the drill intercepts at the Hotspot zone. The sub to horizontal nature of the Hotspot zone is confirmed by these recent drill results. Previously drilled holes LC 20-35 (1.35 g/t over 22.9 meters) and LC 21-67 located some 100 meters NW of the new Hotspot zone confirmed its discovery.

Drill holes showing lower anomalous gold mineralization (300-800ppb) are significant in indicating the presence of potential higher-grade mineralization nearby. The 2023 drill programs at Lapon Canyon will now consist of systematic drilling on section for geological modelling purposes, exploration drilling to discover new gold mineralization, extension of known gold mineralization, in several directions, including now at depth. This recent drill program demonstrated the feasibility of drilling multiple holes from the same drill pad set up, saving time and costs.

This present drilling has extended the strike length and width of the Hotspot zone. The intercepts are a minimum of 60 meters apart. Drill holes LC 22-90 to LC 22-96 were completed from two drill pads, located some 40 meters above and 50 meters away from the Hotspot discovery drill pad (LC 21-80 to LC21-82). Results have also shown that the zone has migrated slightly to the SE. Three drill holes LC 22-87 to LC 22-89, were drilled at the far northern contact with the mineralized alteration zone, approximately 400 meters away from the Hotspot zone, located at the southern region of the mineralized zone. These holes were designed for geological reconnaissance purposes. Notwithstanding, significant anomalous gold values were encountered in granite here.

It is notable that historical workings are present approximately 100 meters above these holes. Hole LC 22-88 was lost at 30 meters. Hole LC 22-90 was lost 35 meters down but did return 0.89 g/t over 7 meters.

Drilling in 2023 will focus on extending strike, width and depth of the Hotspot zone. Drilling across the alteration zone between the area of Holes LC 22-87-89, the Hotspot zone, including, previous discoveries at Holes LC 19-42 and LC 19-43.

The gold mineralization at Lapon Canyon is contained in a wide (over 300 meters), long (over 4 km strike length) intensely altered (sericite, iron oxides) sheared and faulted NE trending fault zone. Gold mineralization is

present pervasively throughout as an envelope of lower grade mineralization (0.5 to 2.0 g/t Au) enveloping distinct high-grade structures that have been drilled over a strike length of over 850 meters and a vertical extent of 400 meters. The high-grade gold mineralization is encountered in discrete, traceable zones located at the intersection of flat lying porphyry dikes and vertical stockwork chimneys.

The Company completed its initial RC drill program at the Pikes Peak portion of the Lapon Gold Project. There are no previously reported drill holes, or any modern data available from the extensive historical mine working at Pikes Peaks. The initial RC drill program was designed for geological reconnaissance, to determine geological parameters and develop mineralization targets for the next drill program here in 2023. However, unexpected significant gold mineralization was encountered at the bottom of PP 22-01. This hole was planned to be drilled to the 300-meter level but was abandoned due to extensive fracturing and ground water at 107 meters. PP 22-01 returned 0.946 g/t Au over 10.6 meters from 96 to 107 meters. Most notably, the final 4.5 meters returned 1.5 g/t with the final assay at the bottom returning 1.93 g/t over 1.5 meters at 107 meters down. Finally, this interval was contained within unaltered granite, and may represent a major fault zone.



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# **Drilling Program Expansion Considered At The Haidee Deposit**

TORONTO - Revival Gold Inc. reported on the final six of eighteen core holes drilled in the Haidee deposit area during the 2022 exploration program at the Beartrack-Arnett Gold Project located in Idaho. Each of the six holesintersected above cut-off grade, near-surface oxidized gold mineralization. Highlights: 1.51 g/t gold over 15.8 meters1 in AC22-086D; 1.07 g/t gold over 18.0 meters1 and 0.45 g/t gold over 13.2 meters1 in AC22-089D;



0.70 g/t gold over 27.1 meters1 in

AC22-099D; 0.42 g/t gold over

19.9 meters1 in AC22-093D; and

1 True width is estimated to be

greater than 70% of drilled width.

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The 2022 drilling program at Haidee was designed to upgrade and expand the deposit's current heap leachable Inferred Mineral Resource. A total of 18 holes were completed for approximately 2,900 meters. Results from the final six holes of the 2022 drilling program include a couple of high-grade gold intercepts at a tenor not typically encountered in oxidized mineralization at Haidee. These results point to the possibility for continued expansion of the deposit to the south-west in potentially higher-grade material with a lower strip ratio.

"We've wrapped up the 2022 Haidee infill and expansion drill program with gold mineralization intersected directly from surface and intriguing high-grade results in the south-west quadrant of the deposit," said Hugh Agro, President and CEO. "These results bode well for the updated Mineral Resource for Haidee and the successful completion of the year's Pre-Feasibility Study on the first phase re-start of heap leach operations at Beartrack-Arnett. The gold deposit at Haidee benefits from very favourable metallurgical recoveries, the presence of little or no deleterious elements, a shallow depth of mineralization and advantageous topography. Any future enhancement to grade at Haidee will therefore have a compounding impact on potential economics.'

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## **SOUTH DAKOTA** New Unionville Zone Discovered At Maitland Project

LEAD, SD - Dakota Gold Corp. announced the discovery of the Unionville Zone in MA22C-009, which intercepted a Precambrian hosted Tertiary breccia zone beneath Cambrian hosted Tertiary replacement gold mineralization at the Maitland Gold Project.

In addition results of three additional holes at Maitland, one of which (MA22C-003) encountered Homestake-style mineralization grading 0.292 oz/ton Au over 10.4 feet (10.03 g/t over 3.17 meters). Assays have been received for MA22C-009 from the surface to 2,075.3 feet (632.55 meters). MA22C-009 was drilled to a total depth of 3,385 feet (1,031.75 meters) and assays are pending on the lower 1,309.7 feet (399.2 meters).

Drill Hole MA22C-009, which intersected 0.104 oz/ton Au over 119.7 feet (3.58 grams/ tonne over 36.48 meters), was designed to test the continuity of Tertiary breccia hosted gold mineralization encountered in MA22C-001 and MA22C-002. MA22C-001 had previously intersected 0.195 oz/ton Au over 16.4 feet (6.69 grams/tonne over 5.0 meters) and MA22C-002 intersected 0.340 oz/ton Au over 9.2 feet (11.66 grams/tonne over 2.8 meters). MA22C-001 and MA22C-002 are located 1,220 feet apart in plan view, suggestive of potential strike length. Follow up drilling will continue to test the continuity and thickness. MA22C-003 intersected 0.292 oz/ton Au over 10.4 feet (10.03 grams/tonne over 3.17 meters) at 5,039.3 feet (1,535.98 meters) within the Homestake Formation.

James M. Berry, Vice President of Exploration, said, "The results of MA22C-009 and the discovery of the new Unionville Zone indicate that breccia zones related to Eocene magmatic activity in the Northern Black Hills are a largely untested opportunity for gold mineralization in the Homestake District. We did not sample for this type of gold mineralization in the Homestake Mine.

Having worked as a mine geologist at the Homestake Mine, I find our Maitland Drill Program very exciting with results to date providing 'proof of concept' for gold mineralization hosted in both Tertiary breccias as well as the Precambrian Homestake Iron FormaTertiary breccia and replacement tified by 880 historical drill gold mineralization, as well as conducting infill and step-out drilling designed to convert and expand the mineralization iden-

holes, to SK1300 compliant resources. Tertiary mineralization in the Precambrian was often overlooked by historical

exploration. As a result of the new Unionville Zone discovery. the 125-year-old historical data sets are being reviewed for additional similar potential zones in

the Homestake District.

The Company's address is 106 Glendale Drive, Lead, SD 57754, (605) 717-2540, Email: info@dakotagoldcorp.com.



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The Company currently has four drills operating on our properties in the Homestake District with two drills operating at Maitland targeting Homestake-hosted and Tertiary gold mineralization.

Two drills operating at Richmond Hill are targeting







#### **CONTINUED FROM PAGE 3 Freeport-McMoRan Portfolio Provides Development Opportunities**

late 2023, which would increase milling capacity to approximately 240,000 metric tons of ore per day to provide for continued annualized copper and gold production volumes of approximately 1.6 billion pounds of copper and 1.6 million ounces of gold. PT-FI is also advancing a mill recovery project with the installation of a new copper cleaner circuit that is expected to be completed in 2024, which is expected to provide incremental metal production of approximately 60 million pounds of copper and 40 thousand ounces of gold per year.

At the Kucing Liar deposit, in the Grasberg minerals district, long-term mine development activities are ongoing which is expected to produce over 6 billion pounds of copper and 6 million ounces of gold between 2028 and the end of 2041. Pre-production development activities commenced in 2022 and are expected to continue over an approximate 10-year timeframe. At full operating rates at approximately 90,000 metric tons of ore per day, annual production from Kucing Liar is expected to approximate 550 million pounds of copper and 560

thousand ounces of gold, providing PT-FI with sustained longterm, large-scale and low-cost production.

In connection with PT-FI's 2018 agreement with the Indonesia government to secure the extension of its long-term mining rights, PT-FI committed to construct additional domestic smelting capacity totaling 2 million metric tons of concentrate per year by the end of 2023. In accordance with Indonesia regulations, PT-FI submits a smelter progress report to the Indonesia government for review every six months.

PT-FI is actively engaged in the following projects for additional domestic smelting capacity: 1) Construction of a greenfield smelter in Gresik, Indonesia with a capacity to process approximately 1.7 million metric tons of copper concentrate per year. Smelter construction is expected to be commissioned during 2024. 2) Expansion of PT Smelting's capacity by 30% to 1.3 million metric tons of copper concentrate per year, which is expected to be completed by the end of 2023. PT-FI is funding the cost of the expansion that will convert to

**Delivering Value. Kinross Gold Corporation** KINROSS www.kinross.com equity, increasing ownership in PT Smelting to a majority ownership interest upon project completion. PT-FI will consolidate PT Smelting's results following the increase to a majority ownership. 3) Construction of a precious metals refinery (PMR) to process gold and silver from the greenfield smelter and Indonesia regulations require PT-FI to renew its export license annually. The current license is scheduled for renewal in March 2023 and PT-FI is preparing its renewal application. PT-FI's special mining license (IUPK) provides that exports may continue through 2023, subject to force majeure considerations. PT-FI will work cooperatively with the Indonesia government to continue exports as required until the smelter is fully commissioned. PT-FI and the Indonesia government continue to engage in preliminary discussions regarding the extension of PT-FI's mining rights under its IUPK beyond 2041.

The two Molybdenum Mines in Colorado - the Climax open-pit mine and the Henderson underground mine produce high-purity molybdenum concentrate, which is typically further processed into value-added molybdenum chemical products. The majority of the molybdenum concentrate produced at the Climax and Henderson mines and at the North America and South America copper mines is processed at it's conversion facilities.

Production from the molybdenum mines totaled 10 million pounds of molybdenum in fourthquarter 2022 and was higher than production of 7 million pounds of molybdenum in fourth quarter 2021, primarily reflecting increased mining rates in response to improved market demand for molybdenum.

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## Walker Lane Mineral Belt, Nevada Multiple Intercepts Below The Isabella Pearl Open Pit

COLORADO SPRINGS, CO-Fortitude Gold Corp. reported multiple high-grade gold drill intercepts below the Isabella Pearl open pit, located within the Walker Lane Mineral Belt, Nevada. Oxide intercepts include 3.05 meters grading 15.15 grams per tonne gold (g/t) within 21.34 meters grading 7.21 g/t gold, and 18.29 meters grading 3.72 g/t gold. Non-oxide intercepts include 6.10 meters grading 12.17 g/t gold within 41.15 meters grading 6.25 g/t gold.

during the fourth quarter of 2022 was designed to test below the projected future Isabella Pearl open pit floor and walls testing for additional oxide ore and to further define minable ore blocks. The program was also designed to better define the transition zone between oxide heap leachable ore and non-heap leachable mineral resources. Oxide and certain transitional gold ores at Isabella Pearl can be processed by using a standard heap leach process, while nonoxide gold ore requires a special milling process for gold extraction and is not currently part of the Company's business plan. Intercepts are being evaluated for possible inclusion into the updated mineral resource inventory.

"This drill program has given us a better understanding of the oxide and transitional ore blocks in the targeted bottom of the open pit that can be processed using our existing heap leach pad and recovery plant," said, Barry Devlin, Vice President of Exploration. "In addition, blocks of oxide and transitional mineralization have been identified below the targeted pit bottom and we are working to include a portion of this mineralization in the upcoming mineral resource update."

"Oxide intercepts including twenty-one meters of over seven grams per tonne gold underscore what an amazing deposit the Isabella Pearl is," commented Jason Reid, CEO and President. "We look to get as much of this oxide and transitional material in the mine plan as possible which is likely to warrant a modification request to our permit to extend and mine the pit a few benches deeper. Though we do not have a current plan to mine nor the facilities to process the high-grade non-oxide gold ore at Isabella Pearl, it is exciting to see non-oxide intercepts including forty-one meters grading

#### This drill program completed

## MONTANA Increase In The MRE For Stillwater West Project

VANCOUVER - Stillwater Critical Minerals reported a 62% increase in the updated independent National Instrument 43-101 (NI 43-101) mineral resource estimate for its Stillwater West platinum group element, nickel, copper, cobalt, and gold (PGE-Ni-Cu-Co + Au) project in Montana. The study showed significant increases in tonnage and contained metal at both a bulk tonnage 0.20% nickel equivalent (NiEq) cut-off (Base Case) and a 0.35% NiEq higher grade bulk tonnage cut-off. A high-grade, selective mining component at a 0.70% NiEq cut-off is presented for the first time.

Michael Rowley, President and CEO, said, "We are very pleased with the expanded 2023 resource, which returned substantial increases in tonnage and contained metals while also increasing the high-grade component. Overall, these increases speak to the fantastic growth potential and under-explored nature of the Stillwater West project, and to our ability to rapidly increase resources in these wide-open deposits with targeted expansion drilling at low discovery costs. Our Stillwater West project, with its world-class endowment of eight critical minerals, is unique in the United States as a districtscale asset located in an active, producing district that has a long history of large-scale critical mineral production.

The US government has recognized the importance of critical minerals to both economic and national security interests and is taking increasing action to secure domestic supply of these key metals at a time when we are advancing Stillwater West and demonstrating its potential. Our exceptional team, with multidecades of experience at both Stillwater and in the parallel layered geology of the Bushveld Igneous Complex, is well-positioned to advance the asset. We look forward to continuing to build on our success and low discovery costs as we finalize our follow up expansion programs for 2023.'

#### **COLORADO**

## PEA Commences For Slick Rock Project, Uravan Region

VANCOUVER - Anfield Energy Inc. reported that BRS Engineering (BRS) has begun a Preliminary Economic Assessment (PEA) for the Slick Rock uranium and vanadium project. Slick Rock is located in the Uravan region of Colorado, in close proximity to Anfield's West Slope uranium and vanadium project. The property holds a historical inferred resource of 2.5 million tons at 0.228% uranium and 1.37% vanadium, returning 11.6 million pounds of uranium and 69.6 million pounds of vanadium and, between 1957 and 1983, Slick Rock produced 2.2 million pounds of uranium and 13.9 million pounds of vanadium. The mineral resource estimates and PEA cited above are based on data and reports prepared by the previous operator of the project. Anfield is treating these reports as historic in nature. Work necessary to independently verify the classification of the mineral resource estimates and the PEA in accordance with National Instrument 43-101, verified by a qualified person, and in compliance with CIM standards has not been completed.

CEO, Corey Dias, said, "We are excited at the prospect of both confirming, and improving upon, the Slick Rock PEA results previously issued, especially given that the results will consider the use of our wholly-owned conventional mill – Shootaring – for the pur-



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pose of producing both uranium and vanadium from Slick Rock ores. We believe that Anfield remains well-positioned to create further shareholder value with regard to its undervalued uranium and vanadium assets through the upgrading of its resource assets. Our two-fold strategy includes a near-term focus on uranium and vanadium production from our primary assets – Velvet-Wood, West Slope and Slick Rock while our longer-term projects such as Frank M, Findlay Tank and Artillery Peak - are expected to provide the Company with a secondary production pipeline to be leveraged once our primary mines are depleted. Finally, the prospect of Shootaring becoming the next operational conventional uranium and vanadium mill is significant both economically as well as with respect to surety of supply for utilities."

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# Favorable Ruling On Record Of Decision For Thacker Pass

VANCOUVER - Lithium Americas Corp. received a favorable ruling from the US District Court, District of

Nevada for the appeal filed Decision (ROD) relating to the against the Bureau of Land Management (BLM) for the issuance of the Record of

Thacker Pass project, located in Humboldt Country, Nevada. The Federal Court has declined to vacate the ROD for the mining Plan of Operations.

The favorable ruling by the Federal Court confirms the per-

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mitting process for Thacker Pass was conducted thoroughly and responsibly, and results in there being no impediment to commencing construction. The Federal Court ordered the BLM to consider one issue under the mining law relating to the area designated for waste storage and tailings and did not impose any restrictions expected to impact the construction timeline.

#### **ALASKA**

#### Plan Of Operation At **Herbert Gold Project**

VANCOUVER - Grande Portage Resources Ltd. has filed its 2023 Plan of Operation for continued mineral exploration at its Herbert Gold project near Juneau, Alaska. Subject to regulatory approval, the proposed work schedule for 2023 consists of up to 10,000 meters diamond drilling with additional detailed mapping and trench sampling to expand previous exploration. The program will consist of one diamond drill rig utilizing up to four pads to drill approximately 12 holes. These holes are planned to test the main mineralized structures of the Goat, Main, Sleeping Giant and Deep Trench veins. Specific targets that do not have a drill hole within 60 meters have been selected to upgrade the resource.

The Herbert Gold Property is host to abundant composite veinfault structures containing ribbon structure quartz-sulfide veins and lies prominently within the 100 mile long Juneau gold belt, which has produced millions of ounces of gold through a total depth range of thousands of feet.



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## POLYMER TECHNOLOGY INCREASES MINES LIFE THROUGH BETTER TAILINGS MANAGEMENT

By David Anstey Senior Tailings Engineer WSP Mining

CANADA - Tailings often contain salts and metals that may be environmentally harmful if allowed to leach into the environment. The tailings slurry is disposed of in a tailings storage facility (TSF) where the solids are allowed to settle and separate from the supernatant water, sometimes over periods of decades. The performance and regulatory requirements for these TSFs are becoming increasingly stringent.

Problems can arise when a mine starts to run out of room in its TSF and there is still ore to be profitably extracted. While it is possible to expand the capacity or build a new TSF, these solutions demand considerable capital investment. There is an opportunity for innovative and environmentally protective low-capital solutions to get better use from existand community attention focused on the risk of TSFs, and competitive market forces on mineral extraction, mining companies around the world are searching for solutions to improve the cost/benefit ratio (i.e., lower capital cost/environmental protection) of their TSFs and extend the life of existing mining operations.

ing TSF space. With both regulatory

Over the past decade, WSP has been involved in research, testing and real-world application of polymer technology to extend the life of TSFs. Polymers are chemicals comprising complex molecules, used in a wide range of applications including water purification. When the right polymers are added to water, particles in suspension in the water are drawn by static electrical charges to the polymers to agglomerate and form larger particles, which grow in size to the point that they settle out of suspension. This leaves water that has a much lower level of suspended material (i.e., slurry), typically the source of leachable by-products.

Applying polymer water purification technology to mine waste. So how does polymer-based water purification technology help a mining company store tailings more efficiently? In most mining operations, tailings are transported to the TSF as a slurry – in which the granular tailings material is pulled through a pipeline by the turbulence in the water. At the outfall spigot, this slurry pours out into the contained TSF so that the tailings form a "beach". Over the mine's life, the beach gradually fills up the TSF.

Problems can occur if the tailings are deposited as a shallow beach into the TSF, covering the available storage area without efficiently using the storage volume available in the facility. Expanding the area of the TSF is often impractical and costly and may also have negative environmental consequences from land clearing and potential groundwater contamination. Because of this, the priority is on finding ways to most efficiently use the available space.

Adding a polymer solution to the slurry can help. If injected into the pipeline a short distance from the tailings discharge location, turbulence in the pipeline will mix the polymer into the slurry stream.

As the polymer-treated tailings are discharged from the pipeline, the large and small suspended particles in the tailings segregate quickly from the water, and the water drains away. This results in a steeper beach that allows tailings to be stored in increased thickness within the available storage area.

Another benefit of polymer technology is that the water that was in the slurry contains fewer solids, meaning that it requires less treatment when it is removed from the TSF and recycled for mining operations. This allows operation of a smaller pond on the TSF, reducing evaporation losses and improving stability of the dams containing the tailings. It also helps to reduce the amount of fresh water that the mine consumes in its operations, which is particularly important in water-constrained regions.

Applying polymer technology to real-world mining situations. WSP experts from around the globe have been collaborating to understand how polymer technology can be applied to a range of minerals and environments. Every application is different – the type of polymer, amount to be used, and other aspects of the process are specific to each mine. This means that site-specific testing is required to determine if polymer technology can help improve tailings management. There is no one-size-fits-all solution here.

There is a growing understanding that, while polymer technology has its limitations, there are many situations where it can improve tailings deposition and water utilization with considerably less capital expenditure than required using conventional solutions, such as expanding the TSF.

When a mine has two- or threeyears' worth of recoverable ore left, it is not worthwhile to expand the existing TSF or build a new one. Instead, polymer technology may be enough to boost the storage efficiency of the current TSF so that the mine can continue to operate profitably until the ore body is exhausted, with no need for an expensive capital investment.

As cited in a paper prepared for the Australian Centre for Geomechanics, polymer technology has been helpful at a magnetite mine in South Australia. During the first five years of operation, water recovery was around 60% and the volume utilisation was in line with the deposition model. The high percentage of water recovered enabled the processing plant to reach its new design capability, reduce significant downtime due to water availability and provide the mining operations with sufficient water for dust suppression. The second five-year plan is currently being finalized and progress is consistent with the tailings deposition and the dewatering model.

WSP now includes polymer technology in its toolbox when assessing the range of solutions available to solve our clients' tailings challenges. Laboratory testing for new projects considers polymer addition alongside more conventional technologies such as thickened tailings, paste and filtration. Multi-criteria analysis of the options, that considers the capital and operating costs and environmental outcomes, allows us to select the solution that provides the most favorable outcome.

Polymer technology is a fast-moving area of science. Many of the polymers that WSP has tested in its laboratories do not even have a commercial name yet. But with testing and experience, a knowledge base is growing to gain the maximum benefit from polymer technology in mining. David Anstey is a Senior Tailings Engineer with over 18 years experience working in Australia and Canada as a geotechnical and mine waste engineer. His experience includes investigation, design, analysis, permitting, construction and operational review of tailings storage facilities and heap leach pads. He has worked on projects for conventional, paste thickened, filtered, co-mingled and inline polymer treated tailings; across 16 commodities in more than 14 countries. WSP has been involved in research, testing and real-world application of polymer technology to extend the life of tailings storage facilities. For more information visit: www.wsp.com/mining



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#### ARIZONA

#### **Copper Creek Phase Two Drill Program Identifies Potential To Grow Open Pit Mineralization**

bidge, President and CEO of Faraday Copper Corp., commented, "The continued success of our Phase II drill program at the Copper Creek Project, located in Arizona, is extremely encouraging as it confirms our view that there is significant upside to the existing Mineral Resource Estimate. This high-grade drill hole demonstrates the potential to grow the open pit mineralization at Copper Creek."

Highlights: Intersected 33.77 metres ("m") at 3.43% copper and 2.53 grams per tonne ("g/t") silver from 38.10 m at the Copper Knight breccia in drill hole FCD-22-016; This interval is within a longer intersection of 65.20 m at 1.88% copper and 1.56 g/t silver from 38.10 m.; The Copper Knight breccia is part of a cluster of mineralized breccias, which includes Copper Giant, Copper Prince, and Copper Duchess.

Drill hole FCD-22-016 was collared north of Copper Knight and drilled to the southeast, closing a gap in historical drilling. The high-grade mineralization is located at the contact between granodiorite porphyry and hydrothermal breccia, where there is increased permeability. Mineralization remains open at depth.

Drill hole FCD-22-011 was collared at the Glory Hole breccia and drilled to the west where previous drill coverage is low. No mineralized intervals of more

LANDER COUNTY, NEVADA

#### Strong Gold-In-Soil **Results At The PWC** Au Project Adjacent

VANCOUVER - Riley Gold Corp. reported on the exploration program for its Pipeline West/ Clipper Gold Project (PWC) located in Lander County, Nevada. The exploration program focused on a large soil geochemical program, extensive field mapping, and a re-interpretation of geophysics. PWC consists of approximately 24.7 square kilometres (sqkm) in the heart of the Cortez District segment of the Battle Mountain - Eureka Trend. The Company has defined new high-priority drill target areas that have never been tested at PWC. Analytical results from the recently completed extensive soil survey identified significant anomalous gold-in-soil values extending more than 3 kilometres (km); Several pathfinder elements, associated with both Carlin-type and intrusive-related gold deposits, were also elevated. Re-interpreted Gravity, CSAMT, and Aero-Magnetic geophysical surveys support the new soil results, and recent geologic mapping provides a supporting structural foundation for the new soil results and geophysical survey interpretations. A drill plan is currently being developed for a maiden drill program expected in 2023. Todd Hilditch, CEO, said, "We are pleased to report successful results from our Fall/Winter 2022 exploration work at PWC and are excited to continue those initiatives into 2023.

VANCOUVER - Paul Har- than 5 m length were identified in this hole. The first 30 m of the drill hole intersected breccia and a leached cap characterized by iron oxides after sulphides, but no significant copper mineralization. Two consecutive samples from 63.36 to 67.70 m yielded 0.29% and 0.41% copper, respectively, and a single 2-metre-wide sample with 1.14 g/t silver and 0.21% copper is present at 210.75 m. These results suggest that the mineral system remains open at depth and to the west of the Glory Hole breccia. Fourteen drill holes have been completed and the results for three drill holes have been released to date. The assay results for additional completed drill holes will be released as they are received, analyzed and confirmed by the

Company.

# **Acquisition Of Royalty Interest In The Cortez Mine Operational Area**

DENVER, CO - Royal Gold, Inc. reported that its wholly owned subsidiary, RG Royalties, LLC, has acquired two portions of a gross smelter return royalty (Idaho Royalty) that together cover a large area including the Cortez mine operational area and the entirety of the Fourmile development project in Nevada (Cortez Complex) from certain holders who are successors in interest to Idaho Mining Corporation.

The area within the Cortez Complex is owned or controlled by Nevada Gold Mines LLC (NGM), a joint venture between Barrick Gold Corporation and Newmont Corporation, with the exception of the Fourmile development project which is owned and operated by Barrick.

Bill Heissenbuttel, President and CEO, said, "With this transaction we have further consolidated our royalty position at the



world-class Cortez Complex. Cortez is a cornerstone asset for Royal Gold and this acquisition increases and expands our interest at one of the world's most prolific gold mines, which is operated by two of the leading companies in the gold business. We have consistently worked to enhance and extend the average life of the Royal Gold portfolio and this transaction again demonstrates our successful execution of this long-term strategy.

The royalty covers areas similar to those covered by the Rio

Tinto royalty that we acquired in August, 2022, with the important difference that the Idaho Royalty includes the existing Robertson deposits. We recognize that our royalty coverage of the Cortez Complex has grown to become more complicated, so as part of this announcement we are introducing a simplified approach to describing our multiple royalty interests across the Cortez Complex. This simplification should highlight our exposure to Cortez and align our disclosure with that of NGM."





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## GHANA **Significant Gold Intercepts From Ongoing Exploration** At The Aboduabo Prospect

VANCOUVER - Asante Gold Corporation reported on the ongoing exploration drilling program at the Aboduabo prospect located on our Bibiani - Chirano mines corridor, Sefwi Greenstone Belt, Ghana.

The Sefwi Greenstone Belt is host to historically significant gold mining operations including our Bibiani and Chirano mines which have produced +8Moz to date from shear faults and veins. Asante controls a 53km long by up to 5km wide corridor which is transected by both the Bibiani and Chirano shear zones. Bibiani and Chirano together have current mineral reserves of ~2.8Moz and Measured and Indicated mineral resources over 4.5Moz. The Company is exploring the corridor for new discoveries, to grow our mine and near mine resources, and to increase the Life of Mine at both operations.

To date nineteen (19) holes totaling 4,300m have been completed. The drilling program has been accelerated and new intercepts confirm near surface, high grade mineralization, with increased widths. The gold mineralization remains open along strike and to depth. The Aboduabo prospect is located approximately 5km north of the Chirano Process Plant and 10km south of the Bibiani Process Plant. It lies within the Bibiani mineralized trend and is hosted in Birimian sedimentary rock sequences. The Chirano gold deposits are primarily hosted in Birimian volcanic and granitoid sequences along the sub parallel Chirano trend.

CEO, said, "We are pleased to report these additional assay results from our exploration drilling program at Aboduabo. These results highlight the potential of this deposit, which is close to surface and mineralized over an area up to 130m wide x 1km long. The drill program to advance the target to resource definition has been accelerated. These results demonstrate the significant exploration potential that remains along the Bibiani - Chirano Corridor."

New drill intercepts include CHDD3347, which intersected 43.10m grading 3.07g/t Au; including 9.95m grading 6.85 g/t Au. All holes intersected gold mineralization, which remains open in all directions. The footprint of gold mineralization tested and confirmed over 1km strike length and remains open along strike and depth. Several mineralized intercepts indicate grade and width that are amenable to open pit mining. Additional drilling is currently underway to follow up on these drill results.

Selected intercepts include: CHDD3347 - 43.10m @ 3.07 g/t Au from 169.5 to 212.6m, includes 9.95m @ 6.85 g/t Au from 196.0m to 205.95m;

CHRC3359 - 26.0m @ 3.12 g/t Au from 121.0m to 147.0m, includes 18.0m @ 4.19 g/t Au from 123.0m to 141.0m; CHRC3350 - 15.0m @ 2.65 g/t Au from 85.0m to 100.0m, includes 7.0m @ 4.44 g/t Au from 85.0m to 92.0m; CHRC3357-17.0m @ 1.74 g/t Au from 44.0m to 61.0m, includes 5.0m @ 4.22 g/t Au from 55.0m to 60.0m; and CHRC3348D - 13.2m @ 1.59 g/t Dave Anthony, President, and Au from 199.3m to 212.5m.w.

## EAST OF TIMMINS, ONTARIO **High-Grade Gold Mineralization Increased At Montclerg Project**

SASKATOON - GFG Resources Inc. reported continued high-grade gold assay results from its recently completed 17hole 2022 Phase 2 drill program at the Montclerg Gold Project, located 40 kilometres (km) east of Timmins, Ontario, Results are from eight drill holes from the MC Central target and demonstrate strong continuity and continued expansion of the gold system. During the Phase 2 drill program, the Company completed a total of 17 holes (3,541 m) on the Goldarm Property located east of Timmins, Ontario. The Phase 2 drill program was designed to complete infill drilling to advance Montclerg towards resource, step-out holes to grow the Montclerg gold system and to begin testing high-priority gold targets within the Goldarm Property such as the Aljo Gold Mine target. Of the 17 holes completed, 14



12 holes from the 17-hole program and anticipates announcing the remaining holes during the first quarter of 2023.

"We are very excited with the results from Montclerg as they continue to outline a robust gold system. The high hit rate, growing continuity and scale of the gold system shows the immense potential of the project. Our progress reinforces our belief in the regional prospectivity of this extremely well-endowed and

CEO of GFG. "We are most encouraged by our best Lower Footwall Zone intercept to date as it demonstrates high-grade continuity that we can effectively model and target. This is such an exciting time as the majority of holes drilled to date have been above 150 m depth and with the continuity we are outlining, there is significant potential for us to continue to grow the Montclerg gold system and make further discoveries across the Goldarm Property."

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## **Drilling Program Confirms Mineralization Model At Marimaca Project In Chile**

VANCOUVER - Marimaca Copper Corp. reported on the 2022 geological and geotechnical drilling campaign. Marimaca has finalized plans for the Q1 2023 exploration program, which will follow-up on previously-released DDH hole MAD-22, which intersected primary sulphides (dominantly chalcopyrite) down-dip of

4m, including 90m at 1.22% CuT from 54m and 74m at 1.17% CuT from 276m; MAD-17 intersected 140m at 0.50% CuT from 12m, including 12m at 1.89% CuT from 140m; ATD-15 intersected 110m at 0.49% CuT from 18m, including 30m at 1.07% CuT from 26m; ATD-14 intersected 62m at 0.78% CuT from 102m, including 10m at 1.76% CuT from 154m; LAD-10 intersected 176m at 0.46% CuT from 114m; MAD-19 intersected 46m at 0.49% CuT from 40m including 24m at 0.77% CuT from 62m; MAD-21 intersected 36m at 0.47% CuT from surface; and Results from the geological drilling campaign will be incorporated in the updated 2023 geological model supporting the planned 2023 MRE, while rock quality information from geotechnical drilling will be utilized in the 2023 development workstreams. Sergio Rivera, VP Exploration, said, "The ~3,000m of diamond drilling completed alongside our 2022 ~38,500m reverse circulation infill drilling program provides us valuable information for our next phase at the Marimaca Project. Results from the geological drilling, in the central MOD, confirm our current interpretation of the MOD mineralization model."

the MOD (92m at 2.11% CuT from 140m including 22m at 5.27% CuT).

Marimaca's 2022 drilling campaign consisted of over 41,500m of RC and diamond drilling between the MOD infill and the MAMIX zone, the depth extension of the MOD. The 2022 MRE, announced on October 13, 2022 incorporates 19,580m of the approximate 41,500m of drilling completed in 2022 for a total of over 110,000m of drilling completed since 2016. The balance of the 2022 infill drilling program will be included in the 2023 MRE planned for early Q2 with the objective of converting Inferred Resources to the Measured and Indicated Categories to underpin a Definitive Feasibility Study ("DFS").

Highlights from reported results include: MAD-18 intersected 346m at 0.71% CuT from

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# New Zone Of Mineralization Identified At Ruby Hill

RENO, NV - i-80 Gold Corp reported that drilling has identified new zone of high-grade gold mineralization in its first hole drilled to test a new target area at the Ruby Hill Property located in Eureka County, Nevada. High-grade gold mineralization was intersected in the first hole drilled to test continuity of a historic intercept below the Archimedes pit.

A historic hole (HC1428) target was tested with a step-out hole, iRH22-65, that intersected highgrade mineralization at the projected target depth. The highlight from hole iRH22-65 drilled to test the 428 Zone: 428 Zone: 12.3 g/t Au over 10.7 m (0.36 oz/ton – 35.0 ft).

The 428 Zone is located approximately 300 metres east of the southern portion of the Ruby Deeps Zone and is one of several brownfields exploration targets tested in the 2022 exploration program at Ruby Hill. This program resulted in multiple gold, polymetallic and base metal discoveries including

the Hilltop Zones where drilling has returned significant high-grade carbonate replacement mineralization (CRD) including 515.3 g/t Ag, 28.9 % Pb, 10.5 % Zn & 0.9 g/t Au over 28.3 m in hole iRH22-43 (Upper Hilltop). The 428 Zone is located below the Archimedes pit and appears to be a combination of distal-disseminated gold mineralization overprinted by later Carlintype gold mineralization. The mineralization is hosted within the top of the Hamburg dolomite at the contact with overlying metamorphosed Dunderberg Shale with close proximity to the Blanchard fault. The Blanchard fault structure was one of the primary feeder structures of the multiple mineralized zones mined in the pit. No other holes have tested this contact in proximity to the Blanchard fault presenting a significant upside target at Ruby Hill. Additionally, the Hamburg dolomite represents a new host of Carlin-type mineralization on the Property and follow-up drilling will be completed during the ongoing 2023 exploration program.

"Our multiple discoveries made in 2022 highlight the potential of the mineralized system at Ruby Hill and confirm our model for the occurrence of multiple types of world-class, high-grade, deposits", said Tyler Hill, Senior Geologist. "Drilling is currently focused on expanding mineralization within the Hilltop Zones and the Blackjack horizon."

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#### **ARIZONA Philadelphia Project Geophysical Survey Identifies Drill Target Below The Flow Dome**

VANCOUVER - Arizona Silver Exploration Inc. reported on a test CSAMT survey on the Philadelphia gold-silver project, Arizona. The survey identified a large low resistivity layer at a depth of 100-200 metres below the top of a hydrothermally altered flow dome complex. The layer is potentially a mineralized body that extends for +500 metres east of existing mineralized drill holes



Greg Hahn, VP Exploration, said, "Building ounces in a low sulfidation epithermal system takes a lot of drilling if the target is simply the veins themselves. Grades in the veins can be spectacular but a gold inventory that includes low grade disseminated style mineralization is potentially a big win. We have intersected considerable widths of low-grade material on the flanks of the flow dome. This survey indicates an extensive target lies below the flow dome hill."

The company's geologic model had predicted a gold target area beneath the altered flow dome and immediately below a "clay cap" identified by hyperspectral analyses of core hole PC22-88, located on the flank of the altered flow dome. The CSAMT anomaly represents a sizeable bulk mining target to the east of our drill holes.

The large low resistivity layer lies at a depth between 100-200 metres beneath the top of the flow dome and extends for +500 meters east of our fence of drill holes. This west end of this target (the Red Hills Target) can be readily tested from drill pads on the patented claims. The heart of the Red Hills target can be drilled from pads currently being permitting with the US BLM under a Plan of Operations (POO). It should be noted that there appears to be a prominent "feeder zone" on the west side of the low resistivity anomaly. Drill hole PC22-91, the easternmost hole on the above section, intersected a prominent hydrothermal breccia immediately before the hole was lost when the rods became stuck. This breccia could be the outer portion of the "feeder zone". This last box of drill core assays 2 gpt gold. The objective going forward is to drill the low resistivity layer and the interpreted "feeder zone" from the BLM pads currently being permitted once permits are received.



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