THE INDUSTRY'S LEADING NEWSPAPER SINCE 1889

THE VOICE OF THE MINING INDUSTRY



Newmont **Production Of 5.9 Million Attributable Gold Ounces**

DENVER, CO - Newmont Corporation reported that in 2020 it produced 5.9 million attributable ounces of gold and over 1 million attributable gold equivalent ounces of co-products, gold CAS of \$756 per ounce, and gold AISC of \$1,045 per ounce achieving 2020 full-year guidance; Generated record \$4.9 billion of cash from continuing operations and \$3.6 billion of Free Cash Flow (97% attributable to Newmont); Ended the year with \$5.5 billion of consolidated cash and \$8.5 billion of liquidity with a net debt to adjusted EBITDA* ratio of 0.2x; Announced industryleading dividend framework, an increase of 38 percent over the prior quarter. Completed the 2020 \$1 billion share-repurchase program and recently announced a new \$1 billion share-repurchase program; Delivered over \$2.7 billion to shareholders through dividends and share buybacks in 2019 and 2020; Achieved best safety performance in the Company's history, focusing on fatality risks across our business; Recognized as top-ranked gold miner for the sixth consecutive year in DJSI Index, announced industry-leading climate targets for greenhouse gas emissions and committed \$500 million over 5 years to climate change initiatives; Reported industry-leading reserves of over 94 million ounces of gold mineral reserves and 65 million ounces of gold equivalent ounces reserves; and Announced 2021 outlook of 6.5 million ounces for 2021, and between 6.2 and 6.7 million ounces through 2023 and between 6.5 and 7.0 million ounces longer-



Newmont reported 5.9 million attributable ounces of gold and over 1 million attributable gold equivalent ounces of co-products. The company achieved best safety performance in history. Also it announced industry-leading climate targets for greenhouse gas emissions and committed \$500 million over 5 years to climate change initiatives. Photo courtesy of Newmont Corporation

term through 2025.

"In 2020, Newmont achieved record performance including \$3.6 billion of free cash flow and ending the year with over \$5.5 billion of consolidated cash. These results enable Newmont to lead the industry in shareholder returns, invest in organic growth

and maintain financial flexibility," said Tom Palmer, President and Chief Executive Officer. "While generating record value for shareholders, we also achieved record safety performance with the lowest injury rate in Company history. As we complete our 100th year, we will remain focused on

delivering superior operational performance whilst creating value and improving lives through sustainable, responsible mining."

Attributable gold production for the year decreased 6 percent to 5,905 thousand ounces from the prior year primarily due to Yanacocha and Cerro Negro being placed into care and maintenance in response to the Covid pandemic, lower ore grade mined at Ahafo and the sale of Red Lake and Kalgoorlie, partially offset by a full year of operations from assets acquired in April 2019. Attributable gold production for the fourth quarter decreased 11 percent to 1,630 thousand from the prior year quarter primarily due to the sale of Red Lake and Kalgoorlie, lower production at Cerro Negro as the site continues to ramp up while managing COVID restrictions and lower ore grade mined at Ahafo, partially offset by higher production at Musselwhite following the completion of the conveyor and materials handling system and higher production at Peñasquito with the successful resolution of community relation issues in late-2019. Gold CAS decreased 5 percent to \$4.4 billion for the full year and 4 percent to \$1.2 billion for the quarter, compared to the prior year, primarily due to lower ounces sold. For the full year, Gold CAS per ounce increased 5 percent to \$756 per ounce primarily due to lower ore grade mined at Yanacocha, Merian and Ahafo, partially offset by lower stockpile Continued On Page 6

News

| Data compilation results define targets at | Jewel Ridge bonanza grade discovery13 |
|--|---|
| Millennium Gold Property | Additional claims staked at Lithium Brine Projects13 |
| South Grass Valley permit secured and drilling contract signed | Hecla begins year with third highest reserves in its history14 |
| Drill mobilization at East Preston Project5 | Drilling has commenced at the Sandman Project15 |
| Black Pine Project approval of plan of operations amendment | BHP operational performance delivers record production17 |
| Definitive agreement to option Rockland7 | Preliminary gold production of 4.9M ounces18 |
| Fort Knox Gilmore first gold ounces from new heap leach pad10 | New high-grade gold zone intersected at Pamlico Project19 |
| Pumpkin Hollow project achieves peak daily hosting11 | Lone Star operation continues on schedule22 |
| Tokop Gold Project land position expanded11 | Magnetic coverage with drone survey at Majuba Hill |



Mineralization Footprint Expands At Virginia Project

VANCOUVER - Silver Sands Resources Corp. reported the remaining results from the Phase I Drilling Program completed in December 2020. The drilling program exceeded management's expectations as it has extended known mineralization along strike at Julia South, Martina SE and Ely Central; added new zones of mineralization along known vein structures and identified new zones of mineralization within previously untested veins. The results from Phase I drilling support management's belief that the global silver resource of the Virginia vein field can be increased significantly.

Highlights include: Extension of known mineralization at Julia South: Julia South - 124.43 g/t silver over 8.5m, including 168.34 g/t silver of 3.9m; Extension of known mineralization at Ely Central; Ely Central - 50.14 g/t silver over 3.00m; New zones of mineralization along strike; Martina SE - 70.8 g/t silver over 13.05m, including 149.54 g/t silver over 3.13m and 596.54 g/t silver over 0.3m; New zones of mineralization in previously untested veins; Julia South Extension - 140.27 g/t sil-

Safety · Quality · Experience · People · Integrity · Competitive



Turnkey Industrial Construction – Storage & Process Tank Erection & Repair Instrumentation & Electrical – Ducting – Lining – Structural, Mechanical Piping Bins – Crushers – Conveyors & Material Handling Equipment

801-543-2100

Please send RFP/RFQs to: <u>Sales@MyGBI.com</u>

ver over 4.2m, including 483 g/t silver over 0.35m; 7 of the 18 drill holes intersected zones in excess of 100 g/t silver, with a further 5 returning values of 30 g/t to 100 g/t silver, that's 12 of 18 holes in total; and Shallow high-grade silver mineralization identified in 6 new zones.

Previously reported, surface mapping and sampling, IP, trenching and previous drilling in the southern and eastern parts of the project are all suggesting that the vein systems on the south and east part of the project are at higher levels in the local volcanic system which require deeper drilling to test the mineralized zones. The geologists are adjusting the location and angle of the Phase II drill holes accordingly.

"The 2020 drilling campaign exceeded our expectations and supports our firm belief in the project," said, CEO Keith An-derson. "The goal of our exploration campaigns remains building and significantly increasing the global silver resource at Virginia leading to an updated resource estimate in H2 2021. The IP, trenching and drilling is therefore focussed on strike extensions, new mineralization along known veins and mineralization in new veins, not redrilling previously known mineralization. The current fully funded Phase II program is well underway with 1507 metres in 10 holes completed. Samples from some of the first holes have been dispatched to the assay lab."

A total of 2,831 metres was completed in 18 holes during Phase I, testing and confirming the presence of new well-mineralized structures not captured in the initial NI 43-101 resource, clearly demonstrating the potential to significantly grow the existing silver resource.The drilling has indicated structure is going to be key going forward, as expected in epithermal vein fields. Down dropped blocks and post mineralization displacement (faulting) appear to be playing an important role, with new structural interpretations incorporated into the current Phase II program targeting. In Julia South for example, drilling intersected the upper levels of the system as defined by low temperature silica species and lower silver values, suggesting the Julia South block is down-dropped relative to Julia Central and North, and highgrade mineralized shoots similar to Julia Central and North may exist at depth. Additionally, several holes intercepted hematite matrix breccia containing silica clasts; these breccias, typically occurring at higher levels in the mineralized system, commonly contain mineralized clasts from deeper parts of the system, suggesting mineralized shoots may be intersected deeper, again suggesting faulting has dropped the mineralized portion of the vein deeper. Again, this new structural interpretation is incorporated into the current Phase II program targeting. wSurface mapping and sampling, IP, trenching and previous drilling in the southern and eastern parts of the project are all suggesting these areas represent higher levels in the local volcanic stratigraphy and epithermal column, deeper drilling to test targets for preserved and mineralized zones.





Data Compilation Results Define Targets At Millennium Gold Project

ration program at the Millen-

VANCOUVER - Stevens Gold Nevada Inc. reported on the data mining of historic geophysical and soil geochemical surveys on the optioned Millennium Gold Property. The Property is located 4.8 km northeast of Lake Havasu City in Mojave County, western Arizona and hosts underexplored low sulphidation volcanic-hosted epithermal gold mineralization with

geological similarities in style of mineralization and alteration to other nearby epithermal gold deposits including the Castle Mountain Mine and the Moss Mine. The Company has submitted its application for a drill permit to the Arizona State Lands Department and is currently awaiting their review and approval.

As part of its ongoing explo-

Royal Gold Record Revenue Reported In Second Quarter

DENVER, CO - Royal Gold Inc. reported net income of \$59.9 million on record revenue of \$158.4 million in its second quarter of fiscal 2021 ended December 31, 2020 (second quarter), with an adjusted net income was \$60.1 million.

Highlights: Record revenue of \$158.4 million, an increase of 28% over the prior year quarter; 76% of revenue from gold at an average price of \$1,874 per ounce; Operating cash flow of \$99.9 million, an increase of 28% over the prior year quarter; Volume of 84,500 GEOs; \$200 million of debt, net cash of \$182 million, with \$1.2 billion of liquidity available; Annual dividend increased, a 7% increase over the prior year, and the 20th consecutive annual increase: Khoemacau construction 85% complete, and 80% base silver stream fully funded; and Continued Board renewal with election of Fabiana Chubbs.

"Excellent performance from our operating portfolio combined with continued robust metal prices led to another quarter of record revenue and strong operating cash flow," said, Bill Heissenbuttel, President and CEO. "The positive price environment continues to support organic growth from within the portfolio including new revenue contributions from Relief Canyon and South Laverton. Solid operating cash flow of almost \$100 million allowed us to further strengthen the balance sheet, increase our annual dividend for the 20th consecutive year, and complete our funding of the advance payment for the 80% base silver stream at Khoemacau

We are pleased to see progress at Khoemacau remain on track for first shipment of concentrate in the third calendar quarter of 2021.

We continued our long-standing practice of maintaining an independent and highly qualified Board of Direc-tors with the election of Fabiana Chubbs following the retirement of Chris Thompson in November. I would like to welcome Fabiana to the Board and thank Chris for his invaluable contribution to Royal Gold over the past several years."

The company's address is 1144 15th Street, Suite 2500, Denver, CO 80202, (303) 573-1660, Fax: (303) 747-6244, nvestorrelations@royalgold.com.

nium Gold property the Company has been extracting useful information to aid exploration by mining historic geoscientific databases. A 2007 program of virtual grid-based soil geochemical surveys based on Mobile Metal Ion Technology (MMI) was undertaken on the Millennium Gold Property and successfully delineated multiple strongly elevated gold responses. A total of 523 samples were collected. Multi-sample, arcuate, ovoid and linear anomalies from widely spaced 400-foot stations varied from 20 to 221 times background and defined broad areas of anomalous response on the property. The wide sample spacing was utilized to assess the property for geochemical signatures originating from structurally related bulk mineable gold mineralization.

Historic ground magnetic surveys were undertaken on the property in 2008 by Zonge Engineering and I.P. geophysical surveys in 2011 by Durango Geophysical Operations.

Multiple magnetic "lows" were defined by the magnetic survey and were interpreted as signatures of magnetic destructive alteration. Several of these magnetic lows were accompanied by high resistivity responses and occurred in areas of known gold mineralization that assayed up to 6 g/t gold as well as at Westley Hill where the Company will undertake its maiden drill program to confirm historic gold mineralization intersected in 2008.

Although ground geophysical and soil geochemical surveys were undertaken on the property at significantly different times there is marked coincidence between magnetic lows, high resistivity responses and multisample gold MMI anomalies in soils. These historic results are value-added information and will assist more focused exploration on the property using modern exploration techniques and drilling.

The proprietary MMI soil geochemical technique is based on the partial extraction of soil samples systematically collected from a specific depth below surface. The method has been utilized on a wide range of commodity types from precious and base metals to diamonds worldwide.

The MMI Process utilizes proprietary partial extraction techniques, specific combinations of ligands to keep metals in solution, and relies on strict adherence to sampling protocols. The MMI process does not indicate the grade of mineralization responsible for an MMI anomaly nor does it indicate the depth of the source region for the anomaly. Accordingly, pairing the MMI results with geophysical surveys provides an effective tool for defining drill targets in terrain where prospective targets are buried by overburden.

The Company is not aware of any legal, political, environmental, or other risks that could materially affect the potential development of the project.



Mine Design and Planning

Mining & Minerals

- Production Scheduling and Strategic Planning
- Resource Modeling / Reserve Estimation
- Evaluation of Expansions or Acquisitions

www.imctucson.com Tel: (520) 294-9861



Exploration

& Production

Environmental

DENVER, CO SPOKANE, WA (800) 688-7337 (800) 748-2928

CASPER, WY (800) 876-4757 **Contact Mill Man Steel** for your casing, tubing, pipe and plate requirements

Steel Processing

Let our commitment to quality provide your company with value and service.

A Native American Woman Owned Business Enterprise

www.millmansteel.com





A Leader in Mining Construction since 1924

www.cowin-co.com

Tunnels • Shafts • Declines **Crusher & Belt Installation • Rock Fall Protection Roof Stabilization • Raisebored Shafts**

Phone 205-945-1300 Fax 205-945-1441



quality lime and limestone products.

DENVER, CO - Solitario Zinc Corp. reported a significant Mineral Resource increase for its high-grade Florida Canyon zinc project in northern Peru. Solitario's joint venture partner, Nexa Resources S.A., completed a new resource estimate incorporating the results of the 2018/ 2019 drilling program and reinterpreting portions of the previous resource model. Solitario, through the work of an independent third-party consultant, has verified Nexa's resource estimate. Solitario will issue a new NI-43-101 compliant resource report before the end of March. Nexa is the world's fourth largest zinc miner and operates three underground zinc mines and a major zinc smelter in Peru and two zinc mines and two zinc smelters in Brazil. The 2021 Mineral Resource Estimate is a mine plan constrained resource that takes into consideration various NSR cutoff grades, depending on mining method. All 2021 additions to the resource were in the Inferred Resource Category.

Mineralization at Florida Canvon consists of zinc, lead and silver contained in sulfide minerals, oxide minerals and mixed sulfide-oxide mineralization. Overall, contained Zn-Eq metal in the 2021 Inferred Resource, including all ore types, increased 64% compared to the 2017 resource estimate from 8.8 million ore tonnes at 11.8% Zinc Equivalent (Zn-Eq) to 14.9 million tonnes at 10.9% Zn-Eq, with an expansion of more than 6.0 million tonnes.

The 2018/2019 drilling program was specifically designed to identify new NI-43-101 compliant sulfide resources at Florida Canyon. This objective was achieved with an overall 105% gain in Inferred Zn-Eq contained metal in sulfide resources compared to the 2017 Inferred Zn-Eq sulfide resource estimate. A comparison of the contained Zn-Eq metal in the inferred sulfide resource in the 2017 estimate versus the 2021 estimate, results in the following increase: In the 2017 Inferred Resource Estimate, 59% of the Zn-Eq resources were sulfide; and In the 2021 Inferred Resource Estimate, 78% of the Zn-Eq resources are sulfide.

Chris Herald, President and Chief Executive Officer, said, "The new 2021 Resource Esti-

zinc demand, a robust \$1.30 per pound current zinc price, and future world-wide stimulus infrastructure spending, we view this significant resource addition as providing further underlying asset value to our shareholders.

Exceptional potential to significantly expand the Florida Canyon mineralized system still exists, particularly immediately to the south and east of the current drilling footprint, where several new surface prospects have been recently discovered, demonstrating two parallel north-south corridors in excess of four-kilometers in length, with virtually no drilling. Additionally, mineralization is open to the North and potentially to the West where no drill tests have been conducted beyond an offsetting fault. Other important undrilled prospects, defined by geochemistry and geologic setting, are located even further north on the property.

The results of the 2018/2019 Florida Canyon drilling program were very successful in achieving our three most important near-term objectives: 1) expanding the steeply dipping San Jorge deposit to the south of previously reported resources and expanding its associated highgrade horizontal mantos to the east; 2) discovering and partially defining the new 1021 Zone in the north central part of the previously drilled footprint over a minimum strike length of 800 meters; and 3) extending a number of horizontal mantos throughout the drilling footprint.

We want to congratulate Nexa for their hard work and commitment in advancing the Florida Canyon project. We are impressed with Nexa's strong social commitment to the communities surrounding the property, including a significant program of local employment and ongoing roadbuilding efforts to better connect communities to each other and the greater regional transportation network."

Several exploratory targets have been identified immediately south, north, east and west of the Florida Canyon deposit with mineralized outcrops. The targets to the south appear to be extensions to the Florida Canyon mineralized corridor. Drill testing some of these satellite targets is planned as they have the potential to significantly in-

Graymont.com

mate exceeded our most optimistic expectations. With strong

crease the mineral resource at the Florida Canyon Project.

Publisher/CEO/Chairman: Don E. Howell 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 Indicate representatives name in subject line

Advertising: Display and Classified Media Kit Available upon request. Email: advertising@miningrecord.com

Subscription Rate

For U.S.: \$55 per year, Canada & Mexico: \$82 per year Foreign: \$99 per year Email: subscriptions@miningrecord.com

Published monthly - \$8.00 per copy

Regional Office: Highlands Ranch, CO 80129 USA Associate Offices: Littleton, CO USA, Gunnison, CO USA Vancouver, BC Canada, SA-MEX-ARG

THE MINING RECORD

INDUSTRY NEWS™

Volume 132. Number 2

HEADQUARTERS:

Post Office Box 1630 Castle Rock, Colorado 80104 USA Toll Free: 1-800-441-4748 USA/Canada Tel: (303) 663-7820 • Fax: (303) 663-7823 www.miningrecord.com • Email: questions@miningrecord.com Electronic Editorial Submissions: Email: editor@miningrecord.com

Published by: The Mining Record Company - HIE, LLC ©Copyright 2021, All Rights Reserved

Business Hours: Monday - Friday 8:00 a.m. - 5:00 p.m.

Distribution Mail House: Commerce City, CO USA • Publication Printing Facility: Tucson, AZ USA

Products and/or Services advertised in The Mining Record are not endorsed by The Mining Record.

The publisher reserves the right to refuse advertising that is competitive with his publications or which, in the publisher's opinion, does not meet with the format of mining publications.

Postage:

Periodicals Postage Paid in Denver, Colorado and additional mailing offices.



The articles published in The Mining Record are obtained from sources considered reliable, but are not to be construed as a solicitation for investment purposes or to buy or sell stock.



The Mining Record is published monthly by Howell International Enterprises, LLC, with Main Office located in Sedalia, Colorado 80135.



Postmaster: Send address changes to The Mining Record, P.O. Box 1630, Castle Rock, CO 80104 USA.





While our company does have registered accounts, our users security is top priority. Our Facebook, Twitter, and Associated Instant Apps pages are designed with no interaction allowed at this point. Consumer Protection Agency reported that scams on social media skyrocketed by 150 percent across Faceboo Twitter and Associated Instant Apps. And the number is likely to continue climbing as more cyber crooks see social as a fruitful target. Our users and clients security will not be compromised with these media outlets at this time. Our web security service for www.miningrecord.com site provides our users informati for the industry with peace of mind. www.miningrecord.com is universal with complete availability through desktop, laptop and all mobile devices. It will remain our focal form for online media access to our users and clients.



South Grass Valley Permit Secured/Drilling Contract Signed

RENO, NV - Nevada Exploration Inc. has completed the permitting process for additional drill sites and signed a contract for a deep-capacity diamond core rig to begin its next phase of drilling at its South Grass Valley Carlin-type gold project, located south of Nevada Gold Mines' Cortez Complex. NGE expects drilling to begin in March. CEO, Wade Hodges, said, "Having confirmed the discovery of a large Carlin-type mineral system with our initial Phase 1 drilling program, and identified what we believe to be the major controls for mineralization with our Phase 2 drilling program, the objective of this next phase of drilling is to demonstrate that we can follow these controls to increasing concentrations of gold. Our geologic modelling has highlighted the importance of the regional-scale, north-northwest-trending Water Canyon structural corridor as the likely primary control for the mineralized hydrothermal fluid

Drill Mobilization At East Preston Project

VANCOUVER - Azincourt Energy Corp. announced that both drill rig and crew have been mobilized on site to begin the winter exploration program at East Preston uranium project, located in the western Athabasca Basin, Saskatchewan, Canada. The exploration program will be a minimum 10-12 hole, 2000-to-2500 meter diamond drill campaign.

Targeting for the 2021 drill program is the conductive corridor from the A-Zone through to the G-Zone and is based on a compilation of results from the 2019 and 2020 drill programs, 2018 through 2020 ground based EM and gravity surveys, and property wide

VTEM and magnetic surveys.

The 2020 HLEM survey completed in December indicates multiple prospective conductors and structural complexity along the eastern edge of this corridor. Drilling in the A zone suggests this structural corridor hosts significant graphitic packages within strongly sheared and faulted host lithologies, indicating an environment conducive to fluid movement and uranium deposition. Drilling will start in the AB-Zone and continue southwest along the

G-Zone.

"Naturally, we're eager to get the drill program underway," said Alex Klenman, President and CEO.

"The most exciting part of what we do is drilling. We're only 12 holes into East Preston, and to date the data generated is suggesting we're getting closer to a potential discovery. The data is strong, and it is reflected through multiple exploration activities that essentially stack on top of one another."

flow through the district, and the potential source of the stratigraphic-hosted mineralization that defines our main East Golden Gorge target. In addition to using these next drill holes to follow the geochemistry and alteration gradient at East Golden Gorge down dip along the favourable "Clm" stratigraphic unit, towards the Water Canyon structural corridor, we also plan to use a number of these holes to collect more information about the corridor including testing for potentiallyshallower mineralization similar to the structurally-related breccia-hosted mineralization at Cortez Hills to the north, as suggested by a series of intensely-silicified mineralized boulders in the mudflow units above the lowerplate limestones encountered in our Phase 1 and 2 drilling."

To provide the flexibility to collect information from both East Golden Gorge and the

Water Canyon structural corridor, the Company has modified its drilling permits to add drill sites further to the east in order to complete a number of drill holes angled back towards the west, designed to intersect both features. These new additional drill sites are now fully permitted and bonded. The anticipated depths for these initial holes are up to 1,200 metres. To complete these relatively deep holes, NGE has contracted Redcor Drilling, based in Carlin, Nevada, to provide a Longyear LF-230 drill rig and associated equipment. The Company's drilling plan is to set casing through the alluvium and the volcanic units sitting on top of the prospective lower-plate limestone, and then to continue core drilling to the target depths. Drilling is expected to continue 24-hours, 7-days per week, and expected each hole will take an average of five weeks to complete.



from 14 gauge to 1/2". Naylor offers the necessary fittings, couplings, fabrications, coatings and linings to provide you with your complete pipe system.

For more information, call or E-mail us for our catalog.



Ine Industry Leader Since 1925

NAYLOR PIPE COMPANY 1230 East 92nd Street Chicago, IL 60619 773.721.9400 • Fax: 773.721.9494 E-mail: sales@naylorpipe.com www.naylorpipe.com



Contact us to Learn More (833) 775-7729 | www.praysolutions.com





CONTINUED FROM PAGE 1 In The Quarter, \$806M Net Income From Operations

and leach pad inventory adjustments. For the fourth quarter, Gold CAS per ounce increased 7 percent to \$739 per ounce primarily due to lower ore grade mined at Ahafo and Porcupine, lower mill throughput at Cerro Negro and higher gold price-related royalties.

Gold AISC for the year increased 8 percent to \$1,045 per ounce from the prior year primarily due to higher CAS per ounce and Covid-related care and maintenance costs.

Gold AISC per ounce for the fourth quarter increased 10 percent to \$1,043 per ounce from the prior year quarter primarily due to higher CAS per ounce and higher sustaining capital largely driven by the Autonomous Haulage System progressing ahead of schedule at Boddington.

Attributable gold equivalent ounce (GEO) production from

other metals for the year increased 64 percent to 1,021 thousand ounces from the prior year primarily due to a full year of operations from Peñasquito following resolution of the community issues in late-2019, partially offset by the site being placed on care and maintenance in the second quarter of 2020. Attributable GEO production from other metals for the quarterincreased 18 percent to 271 thousand ounces from the prior year primarily due to operations at Peñasquito receiving sustained community support following the blockade in 2019, partially offset by lower ore grade milled at Boddington.

CAS from other metals totaled \$606 million for the year and \$157 million for the quarter. CAS per GEO2 for the year improved 33 percent to \$571 per ounce primarily due to higher sales at Peñasquito. CAS per GEO for the quarter improved 29 percent to \$561 per ounce primarily due to higher sales at Peñasquito, partially offset by unfavorable foreign exchange impacts from the strengthening of the Australian dollar and lower sales at Boddington.

AISC per GEO for the year improved 30 percent to \$858 per ounce primarily due to lower CAS from other metals, partially offset by care and maintenance costs. AISC per GEO for the quarter improved 28 percent to \$846 per ounce primarily due to lower CAS from other metals and lower sustaining capital spend.

Net income from continuing operations attributable to Newmont stockholders for the year was \$2,666 million, a decrease of \$211 million from the prior year primarily due to a \$2,390 million recognized gain on the formation of NGM in the prior year. After removing the gain related to NGM, net income increased \$2,179 million from the prior year largely driven by higher realized gold prices, gains on asset and investment sales, lower transaction and integration costs and lower general and administrative costs, partially offset by lower sales volumes from certain sites being placed on care and maintenance, the sale of Red Lake and Kalgoorlie, and higher costs in response to the pandemic.

Net income from continuing operations attributable to Newmont stockholders for the quarter was \$806 million, an increase of \$269 million from the prior year primarily due to higher realized gold prices and gains on asset and investment sales, partially offset by lower sales volumes from the sale of Red Lake and Kalgoorlie, higher tax expense and reclamation and remediation adjustments primarily related to increased costs at Yanacocha.

Revenue increased 18 percent to \$11,497 million for the full year and 14 percent to \$3,381 million for the quarter, compared to the prior year. These increases were primarily due to higher average realized gold prices and higher gold equivalent sales volumes, partially offset by lower gold sales volumes.

Average realized price for gold increased \$376 per ounce to \$1,775 per ounce for the full year and \$374 per ounce to \$1,852 per ounce for the quarter, compared to the prior year. For the full year, average realized gold price comprised \$1,778 per ounce of gross price received, the favorable impact of \$9 per ounce mark-tomarket on provisionally-priced sales and \$12 per ounce reductions for treatment and refining charges. For the quarter, average realized gold price comprised \$1,865 per ounce of gross price received, the favorable impact of \$4 per ounce favorable mark-tomarket on provisionally-priced sales and \$17 per ounce reductions for treatment and refining charges.

Capital expenditures decreased 11 percent to \$1,302 million for the full year and decreased 7 percent to \$398 million for the quarter, compared to prior year, primarily due to the sale of Red Lake and Kalgoorlie and reduced spending from the completion of Borden Underground, Ahafo Mill Expansion, and other sustaining projects in 2019.

Development capital expenditures in 2020 primarily include advancing Tanami Expansion 2, Yanacocha Sulfides, Ahafo North, the Subika mining method change, Musselwhite Materials Handling System, Éléonore Lower Mine Material Handling System, Quecher Main, and projects associated with the Company's ownership interest in Nevada Gold Mines.

Consolidated operating cash flow from continuing operations increased 70 percent to \$4.9 billion for the full year and increased 40 percent to \$1.7 billion for the quarter, compared to the prior year, primarily due to higher realized gold prices, partially offset by lower sales volumes. Free Cash Flow8 also increased to \$3.6 billion for the full year and \$1.3 billion for the quarter primarily due to higher operating cash flow and lower capital expenditures. Balance sheet strengthened in 2020 ending the year with \$5.5 billion of consolidated cash and approximately \$8.5 billion of liquidity; reported net debt to adjusted EBITDA of 0.2x9. Portfolio improvements achieved during the year: Completed divestment of the Red Lake Complex in Canada, the Company's 50 percent ownership interest in Kalgoorlie Consolidated Gold Mines in Australia, investment holdings in Continental Gold, and a portfolio of eleven royalties; formed exploration joint ventures with Kirkland Lake Gold Inc. in Canada and Agnico Eagle Mines Limited in Colombia; completed materials handling projects at Musselwhite and Éléonore in Canada; progressed Autonomous Haulage System at Boddington in Australia, the Tanami Expansion Continued On Next Page

WHERE VISION AND VALUE COME TOGETHER





THYSSEN MINING local challenges | GLOBAL SOLUTIONS

thyssenmining.com

info@thyssenmining.com



Approval Of Plan Of Operations Amendment At Black Pine Project

additional 4.6 square kilometers

VANCOUVER - Liberty Gold Corp. announced the receipt of approval of an amendment to its Plan of Operations at the Black Pine Project. Located in southern Idaho, Black Pine is a past-producing, run-of-mine, oxide-heap leach gold mine that contains a large, shallow, district-scale, Carlin-style sedimentary rock-hosted gold system.

The amended Plan of Operations grants Liberty Gold: Comprehensive access to an

("km2") of an expansive gold system, bringing the total num-**Definitive Agreement To Option Rockland Property**

has now entered into a Definitive Agreement with vendor Enigma Resources LLC for an option to purchase the Rockland, Nevada gold-silver property. The terms of the Definitive Agreement remain the same as those of the Letter Agreement previously announced. The Rockland Property hosts a long (+800 metres), broad (~200 metres), gold-silver zone encompassing high-grade intervals and accompanied by strong trace element geochemistry

The Rockland property's near-term exploration potential and drive-on, year-round access

TORONTO - Evergold Corp. make it strongly complementary to the Company's flagship Snoball and Golden Lion prospects in northern British Columbia. At Snoball, the Company discovered an early-stage high-grade gold-silver vein system in Phase 1 sampling and drilling in 2020, and a large-scale gold-silver zone has been outlined at Golden Lion by the Company's 2020 Phase 1 drilling and by historical drilling carried out by Newmont in the 1980's.

> The company's address is 18 King Street East, Suite 902, Toronto, ON M5C 1C4, (613) 622-1916, info@evergoldcorp.ca, www.evergoldcorp.ca.

ber of km2 under the Plan of Operations to 11.9 km2; A total of up to 50.7 additional acres of disturbance, bringing the total to 224.8 acres; An additional 15.3 miles of new roads, for a total of 56.7 miles; An additional 154 drill pads, subject to a staged annual reclamation plan, bringing the total to 596 sites; Access to a water well that was used for the historic mine operation, which can now be used to support exploration efforts at Black Pine; and Access to areas between the Rangefront and M Zones to the east and the Discovery Focus Area, F and J zones to the west, linking the entire Black Pine Oxide Gold system together on a district scale.

"This important milestone permits access to the largest undrilled target area in the Black Pine gold system, covering several square kilometres of highconviction ground," said Cal Everett, President and CEO. "It is nice have so much elbow room."

"Throughout the many challenges presented by the year that was 2020, we worked with the US Forest Service and Bureau of Land Management to produce the Environmental Assessment and met all of the timelines and

milestones necessary to expand the footprint of this project," added Moira Smith, Vice President of Exploration and Geoscience "We appreciate their

professionalism and thoroughness and look forward to working with them into the future as we advance the project toward the development stage."



Continued From Page 6 **Newmont Mining Corporation**

2 project in Australia, and a mining method change at Subika Underground in Ghana; advanced study work at Ahafo North and Yanacocha Sulfides with both projects expected to reach full funds approval in 2021.

Nevada Gold Mines (NGM) attributable gold production for the year was 1,334 thousand ounces with CAS of \$757 per ounce and AISC of \$920 per ounce. NGM attributable gold production for the quarter was 342 thousand ounces with CAS of \$739 per ounce and AISC of \$872 per ounce. EBITDA10 for NGM was \$1,279 million for the full year and \$364 million for the quarter.

Pueblo Viejo (PV) attributable gold production was 362 thousand ounces for the year and 106 thousand ounces for the quarter. Pueblo Viejo EBITDA10 was \$434 million for the year and \$136 million for the fourth quarter with cash distributions received for the Company's equity method investment of \$260 million for the year and \$109 million for the fourth quarter.

Newmont's capital-efficient project pipeline supports improving production, lower costs and extending mine life. Funding for the current development capital project Tanami Expansion 2 has been approved and the project is in execution stage. The Company has included the Ahafo North and Yanacocha Sulfides projects in its long-term outlook as the projects are scheduled to be approved for full funding in 2021. Additional projects, represent incremental improvements to the Company's outlook. Tanami Expansion 2 (Australia) secures Tanami's future as a long-life, low-cost producer with potential to extend mine life beyond 2040 through the addition of a 1,460 meter hoisting shaft and supporting infrastructure to achieve 3.5 million tonnes per year of production 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 is expected to reduce operating costs by approximately 10 percent. Capital costs for the project are estimated to be between \$850 million and \$950 million with a commercial production date in the first half of 2024

Ahafo North (Africa) expands our existing footprint in Ghana with four open pit mines and a stand-alone mill located approximately 30 kilometers from the Company's Ahafo South operations. An investment decision is expected in the first half of 2021 and the project is expected to add 300,000 ounces per year with allin sustaining costs between \$600 to \$700 per ounce for the first five full years of production (2024-2028), with estimated capital costs of between \$700 and \$800 million. 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 and Indicated and Inferred Resource and significant upside potential to extend beyond Ahafo North's current 13-year mine life.

Yanacocha Sulfides (South America) will develop the first phase of sulfide deposits and an integrated processing circuit, including an autoclave to process gold, copper and silver feedstock. The project is expected to add 500,000 gold equivalent ounces per year with all-in sustaining costs between \$700 to \$800 per ounce for the first five full years of production (2026-2030). An investment decision is expected in the second half of 2021 with a three year development period and estimated capital costs of approximately \$2 billion. 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. The company's address is 6900 E Layton Avenue, Suite 700, Denver, CO 80237, 303. 863.7414, Fax: 303.837.5837, eric.colby@newmont.com.



We're not in mining because it's easy.

We thrive on challenges

GOLDER

golder.com







BUILDING ON STRENGTH

www.fcx.com



Expansion Of The SH-1 Zone At Unga Project, Alaska

VANCOUVER - Heliostar Metals Limited reported results from six additional holes completed at the SH-1 Zone in its 2020 exploration program at the Unga project in Alaska. EO, Charles Funk, said, "SH-1 continues to deliver robust widths and high grades as we step out and expand on the historical drilling, particularly in holes SH20-03 and SH20-04. The company is preparing to recommence drilling at Unga in late March to continue infilling and stepping beneath open intersections at the SH-1 zone. Assays also remain pending from the Apollo-Sitka Mine area and the Aquila zone."

Drilling Highlights: SH20-03: 6.66 grams per tonne (g/t) gold and 11.7 g/t silver over 6.97 metres (m) from 20.0 m downhole including; 8.32 g/t gold and 12.0 g/t silver over 5.52 m from 21.45 m downhole including; and 19.80 g/t gold and 23.3 g/t silver over 2.0 m from 23.0 m downhole. SH20-04: 5.13 g/t gold and 14.6 g/t silver over 4.42 m from 13.26 m downhole including; and 11.5 g/t gold and 20.7 g/t silver over 1.58 m from 13.26 m downhole.

SH-1 Zone: SH-1 is a priority target at Unga. It holds a highgrade, inferred resource containing 384,318 ounces gold at a grade of 13.8 g/t and has significant potential for expansion, with high grade intercepts open along strike and at depth. The resource is centred on the Main Shoot, which is well defined by tightly spaced drilling, but is loosely defined by widely spaced drilling outside of this zone.

A 100-metre vertical gap existed between surface and the first historical vein intercepts and in 2020, seven holes were completed to improve our understanding of the rocks around the upper portions of the Main Shoot. The reported holes are 50 metre step outs on previously completed drilling. Based on previous drilling, it was possible to interpret both steep and shallow plunges to mineralization. Holes SH20-02 and SH20-03 suggest a steeper orientation is more likely and this will guide drilling in 2021.

The company also completed two deeper holes in 2020 to test depth extensions in areas of widely spaced drilling. These holes each intersected a wide vein, but gold mineralization is low-grade. Epithermal veins have natural variability in the distribution of mineralization, and these are the first two of 10-12 that the company plans to drill to systematically infill the loosely defined areas to better constrain the distribution of coarse grained gold.

The deepest completed hole to date at SH-1 intersected 23.99 g/t gold over 5.48 metres in hole BM-01 and the company will continue expand to depth where the system remains open.

Drilling along strike from the Main Shoot indicates parallel zones of mineralization that remain open and will be tested when drilling recommences.

SH-1 is one of multiple epithermal gold targets along the 8.4km-long Shumagin vein corridor. It is the most advanced prospect at Unga with a high-grade inferred resource and has considerable potential for expansion.

The SH-1 inferred resource sits at the eastern end of the Shumagin vein corridor, where quartz veining and alteration with associated gold mineralization form an elongate hill. At SH-1, the vein occurs between rhyolite in the hanging wall to the southeast and andesite in the footwall to the northwest. The vein comprises a multi-episodic quartz vein, with a core of competent, brecciated quartz vein that grades outwards through an intense to weak zone of quartz alteration. Gold and lesser silver mineralization is carried within the veins and strongly silicified zones, and is usually found associated with the zinc and lead sulphides, sphalerite and galena.





Harrison Western Construction Experience | Integrity | Performance Responsible Natural Resources Development[™]

T 800.638.8793 | www.harrisonwestern.com

UNLOCKING THE POWER OF YOUR DATA

SourceOne[®] INDUSTRY PLATFORM



Mining Technologies®

Visit our website for more information!

www.eclipsemining.com



TORONTO - Kinross Gold Corporation, President and CEO, J. Paul Rollinson, said, "In 2020, we made excellent progress advancing our high-quality and diversified project pipeline and added 5.7 million gold ounces to our mineral reserve estimates after depletion. We extended mine life at Chirano by three years, and by one year at Kupol and Paracatu, and we continue to focus on opportunities for further mine life extensions. Our successful track record in project development, mine plan optimization and exploration underpins our robust production profile, which is expected to grow by 20% over the next three years. The Tasiast 24k and La Coipa projects, which are currently under construction, remain on schedule and are proceeding well. First gold was produced from the Fort Knox Gilmore project's new heap leach pad, while study and development work at Lobo-Marte, Udinsk and Peak advanced well. We are looking forward to significant project milestones in 2021 and are ramping up our exploration efforts as we continue to strengthen our global portfolio."

The Tasiast 24k project is advancing on schedule and on budget, expected to increase throughput to 21,000 t/d by year-end 2021 and to 24,000 t/d by mid-2023; Drilling and study work are progressing well at Udinsk. The pre-feasibility study has now commenced and is expected to be completed in Q4 2021; added 259 Au koz. to estimated measured and indicated resources and 94 Au koz. to inferred resources; The La Coipa Restart - Pre-stripping started on schedule in early January 2021 and first production remains ontrack for mid-2022; added 103 Au koz. and 3,266 Ag koz. to mineral reserve estimates as a result of mine plan optimization; At Lobo-Marte, feasibility study is on-track for completion in Q4 2021; The Fort Knox Gilmore reported first gold ounces that were produced from the new heap leach pad and construction was completed on schedule and under budget; and Peak has commenced the drilling program and studies for permitting after acquiring 70% of synergistic, Fort Knox "bolt-on" project in September 2020.

Kinross added 5.7 million Au oz. to proven and probable min-

eral reserves in 2020, a 23% year-over-year increase, to 30.0 million Au oz. mainly due to net additions of 6.4 million Au oz. at Lobo-Marte, 446 Au koz. at Chirano and 103 Au koz. at La Coipa, while maintaining a \$1,200 per ounce gold price assumption; Due to successful exploration and mine optimization programs, Kupol and Paracatu extended mine life by one year to 2025 and 2032 respectively, and Chirano extended mine life by three years to 2025, with further opportunities for additional mine life extensions; and In 2021, Kinross expects to ramp up its global exploration program with a focus in Russia and Chirano, and will continue to prioritize opportunities within the footprint of existing mines in its global portfolio for mineral resource and reserve additions.

The Company's exploration efforts continued to focus within the footprint of existing mines during 2020, with a total of more than 135,000 metres of drilling completed for brownfields projects. While the coronavirus pandemic affected surface drilling at Kupol, underground drilling was not impacted and returned strong results. Drilling programs at Chirano and at the Company's Americas sites were not materially impacted by COVID-19. Highlights of the 2020 brownfields exploration program include significant results at Kupol and Chirano, which contributed to the extension of mine life for one year to 2025 at Kupol, and three years to 2025 at Chirano, with opportunities for further mine life extensions at both operations.

Exploration efforts and engineering optimization added a total of approximately 8.7 million Au oz. in estimated mineral reserves before depletion in 2020.

In North America, Kinross explored projects in both joint venture (JV) and 100%-owned Kinross claims. Kinross and its JV partners undertook geochemical sampling, ground and airborne geophysical surveys and drilling programs. At several projects, exploration work identified indications of mineralization and generated prospective targets, with first and second phase drilling programs completed in 2020. The Company and its JV partners have also identified new opportunities in Nevada, Ontario, Manitoba, Far East Russia and Finland, and are reviewing potential drilling programs at these projects for 2021.

FEBRUARY 2021

First Drilling Results From Robber Gulch Property

VANCOUVER – Gold Lion Resources Inc. reported results of the first hole drilled by the Company on its Robber Gulch Property located near Burley, Idaho. Reverse Circulation drill hole RG-RC-20-01 intersected three separate intervals of stratabound gold mineralization, southeast of the project's Raider Zone. The drill hole was collared 330 meters southeast of trenches RG-TR-20-02 and RG-TR-20-03, prior to the Company receiving those analytical results.

The drill hole targeted a steeply dipping structure coincident with strong gold mineralization from grab samples collected on the Sawtooth National Forest. As the Company does not yet have its Forest Service drilling permit, the hole was collared on an existing road on BLM ground, well downslope of the strong surface mineralization. Prior to reaching the mineralized structure, the hole encountered the Manning Canyon Shale, which underlies the receptive gold bearing units. Despite intersecting the gold bearing calcareous sandstone host approximately 160 meters east of the mineralized structure, the hole returned 0.20g/t over 24.4m and 0.24 g/t Au over 48.8 meters. The host sandstone units are interpreted to have a high degree of porosity and permeability and the grade of gold correlates with their proximity to the mineralized structure.

The Phase II drill program includes several drill holes located along a section of road crossing the mineralized structure identified at the project's Raider Zone. The holes will be drilled at steep to vertical orientations to test the thickness of the shallow dipping mineralization within the receptive host units.

Following the completion of the Phase II drilling program, the Company plans to continue stepping south on to Sawtooth National Forest ground where the best grab samples, up to 6.49g/t Au, have been collected on surface to date. Highlights: Carlin-type gold mineralization intersected in RG-RC-20-01 at depth, a considerable distance from the north-south oriented mineralized structure recently discovered in trenches RG-TR-20-02 and RG-TR-20-03 within the project's Raider Zone; Plan of Operations permit application prepared to allow drilling to continue onto Sawtooth National Forest ground, to test stronger mineralization to the south of the current drilling which is constrained to BLM lands; and Property located on road-accessible BLM and Forest Service ground, close to infrastructure within the mining-friendly State of Idaho.



ADAPTIVE TECHNICAL

Working together for the success of your project. Innovation driving opportunity.

Cementation WE BUILD MINES. SAFELY.

meritconsultants.net

Cementation



cementation.com

tntinc.com

Mine Development & Construction • Shaft Sinking • Raise Boring • Feasibility & Design Engineering Contract Mining • Process Facilities Construction • Project & Construction Management • Material Handling



Pumpkin Hollow Project Achieves Peak Daily Hosting

YERINGTON, NV - Nevada Copper Corp. reported at its Pumpkin Hollow project it achieved a peak daily hoisting rate of over 3,000 tons in February, and has achieved a hoisting rate equivalent to 5,000 tons per day on a shift basis. Despite the improving hoisting rates, the cumulative impact of a series of unplanned stoppages due to mechanical issues and other incidents in the main shaft has led to lower than expected ore production to date in 2021. Average hoisting rates for February to date were approximately 1,600 tons per day, compared to plan of approximately 3,000 tons per day. Retrofitting work to resolve these issues is

expected to be completed soon.

Mill throughput has performed well at an average of approximately 3,100 tons of ore per day to date in 2021, with a peak of 4,000 tons per day. Recoveries have continued to increase, with average recoveries of approximately 90% in February. Product specifications remain consistent with expectations, with high-grade, clean copper concentrates being delivered to the Company's offtaker. The mill continues to process development ore, with higher grade stope ore expected to be available in the coming months as planned.

As a result of the shaft delays noted, and delayed upgrade of

the underground electrical and ventilation systems, production of copper concentrates during the first half of 2021 is expected to be significantly lower than planned.

The resolution of the main shaft commissioning items, the ongoing installation of incremental underground power and ventilation upgrades and the deployment underground of additional mobile fleet equipment is expected to result in increased copper production rates beginning in the second quarter of 2021.

The Company expects that, due to the delays noted, steady state production of 5,000 tons of ore per day will be deferred from mid year into the third quarter of 2021.

"We are pleased with the continued improvements of the milling operations and the peak hoisting numbers achieved this month," stated Mike Ciricillo, CEO. "We look forward to completing upgrades to the Main Shaft in the coming weeks and the resulting increases in hoisting and production."



Riley Gold Expands Tokop Gold Project Land Position

VANCOUVER, BC - Riley Gold Corp. has significantly increased the land position of its Tokop Gold Project, located within the Walker Lane Trend, Nevada, by 400% to over 21 square kilometers (sq kms). The significant and strategic increase of the Tokop Project land package was designed to cover additional geological interpretation and was completed with staking of additional 160 unpatented mining claims covering approximately 3,280 acres (or 13.3 sq kms) and by executing an option agreement on the Rattlesnake East property to purchase additional unpatented mining claims covering approximately 922 acres (3.7 sq kms). The Tokop Project area now encompasses approximately 21 sq kms.

"We are extremely pleased with our findings at the Tokop Project to date and look forward to initiating our maiden drill program, which is expected to begin in the upcoming months," said, Todd Hilditch, CEO.



For more than four decades, our professionals have supported the mining community with permitting, environmental compliance, remediation, reclamation, due diligence, and title work at hundreds of mines and mineral processing sites in 39 states and in several Native American nations.



We excel at our business because we take the time to understand yours

Gallagher&Kennedy

Phoenix | Santa Fe 602-530-8000 www.gknet.com



Six Drill Holes Completed At Green Springs Charlie Zone

VANCOUVER - Contact Gold Corp. reported results for 6 more drill holes completed at the Charlie Zone during the 2020 drill program at the Green Springs gold property, Nevada. Drill Highlights: 2.34 g/t Au over 33.53 m from a depth of 49.99 metres in hole GSC20-05, 81% Cyanide recovery; Including: 3.01 g/t Au over 19.81 m; 1.50 g/t Au over 19.81 m from a depth of 60.96 m in hole GS20-28, 82% Cyanide recovery; Including: 1.67 g/t Au over 16.76 m; and 0.91 g/t Au over 19.81 m from a depth of 96.93 m in hole

GSC20-06 -75% Cyanide recovery. 2020 Drilling at the Charlie Zone was designed to confirm and expand oxidized near surface Chainman limestone hosted mineralization and gather the geological information necessary to properly target the poorly tested Pilot Shale

Next Phase Of Exploration At Pilar Gold-Silver Project

CALGARY - Tocvan Ventures Corp. reported the start of the next phase of exploration at Pilar. Work will include detailed mapping and sampling of key targets across the Pilar Gold-Silver Project. The aim of the program will be to advance key targets to drill ready status for a Phase II drill program planned in the next couple of months.

Key Target Areas: Main Zone Extension: 800 meter southeast extension of the Main Zone; Historic drillhole JES-18-03 13.5 m @ 5.6 g/t Au and 22 g/t Ag; 800 meters of anomalous soils with values ranging from 106 ppb to 911 ppb Au; and Rock grab samples including 9.3 g/t Au and 76 g/t Ag. 4-Trench: 600 meter trend that includes the 4-Trench Zone highlighted by: Historic drillhole K-16: 7.5 m @ 3.3 g/t Au and 31 g/t Ag; 600 meters of anomalous soils with values ranging from 118 ppb to 2,030 ppb Au; Rock grab samples including 24 g/t Au and 116 g/t Ag; and Network of historic artisanal workings.

"We are excited to have boots back on the ground at Pilar," said, VP Exploration, Brodie Sutherland. "The results released for our Phase I drill program show the potential to grow the known extent of mineralization at depth and along strike. The high-grade gold and silver intercepts provide evidence for deep rooted structures which we are just starting to uncover. Mapping and sampling of the surface expressions of these structures will aid in drill targeting as we move towards Phase II." target, which generally lies at a depth below surface of 200 meters or less at Green Springs. This area of Charlie is between 2 past producing open pit mines, near the current centre of the Green Springs Mine Trend, which is wide open for expansion in a southerly direction from the Zulu Zone. Gold mineralization is observed at the lower Chainman jasperoid. The results from hole GSC20-05 provide the highest-grade drill intercept in the Charlie Zone to date and are well oxidized with a CN solubility ratio of 81%.

"These results from Charlie demonstrate our ability to deliver thick intervals of oxidized gold mineralization across all zones at Green Springs," said, Matt Lennox-King, CEO. "As we continue to dial in our structural model and refine our targeting to follow up on the high-grade oxide results from 2020, we are extremely excited for the 2021 drill program at Green Springs which is expected to start up soon and will be targeting expansion of the Chainman hosted mineralization and discovery of new zones of gold mineralization in poorly tested Pilot shale target."







Contract Raise Boring Vent Shafts • Penstocks Ore Passes • Man-Ways Lined or Unlined





For Information Contact: Raisebor (505) 334-8700 Fax: (505) 334-8740

email: mhardwick@raisebor.com www.raisebor.com

301 Industrial Drive Birmingham, AL 35211-4443

A Division of Cowin & Company Inc.



Jewel Ridge Gold Property Bonanza Grade Discovery

VANCOUVER - Golden Lake Exploration Inc. reported the discovery of a high-grade

(gold-silver-lead-zinc) mineralized oxide zone in diamond drill hole JR-20-DD12 on the North-

Additional Claims Staked At Lithium Brine Projects

Sunrise Gold Corporation has since 1966. Nevada Sunrise staked additional claims at its two lithium brine projects in Nevada. The Company owns 100% interests in the Gemini Lithium Project and the Jackson Wash Lithium Project, both located in the Lida Valley basin in Esmeralda County, Nevada.

A total of 40 claims totaling approximately 800 acres (194.25 hectares) were staked to expand the boundaries of Gemini and Jackson Wash.

"The discovery of lithiumbearing brines can present a small footprint, environmentallyfriendly method of lithium production in Nevada," said Warren Stanyer, President and CEO. "Our Lida Valley properties are underexplored, and the increased land position from our recent staking covers what we believe are our best lithium brine target areas for future drilling."

Exploration at the two projects is complemented by the Company's 80.09 acre/feet/year water right, a pre-requisite for the exploration and development of lithium brine projects in Nevada. Gemini is ideally situated adjacent to the Gold Point Solar Energy Zone, a Bureau of Land Management land reserve set aside until 2033 for potential solar and wind power electrical generation projects.

The Lida Valley is a flat, arid basin with a similar geological setting to the better-known Clayton Valley basin where Albermarle Corporation operates the Silver Peak lithium mine,

VANCOUVER - Nevada which has operated continuously acquired Gemini and Jackson Wash in 2015 by claim staking and purchase by option, respectively. The Company recently initiated a review of historical geophysical and geological data collected at Gemini and Jackson Wash to better define lithium brine targets.

east Eureka Target on the company's keystone Jewel Ridge gold property located near the town of Eureka, Nevada. From surface an intercept of 24.54 meters was intersected returning 9.16 grams gold per tonne (g/t Au), 65.8 grams silver per tonne (g/t Ag), 1.03 percentage lead (% Pb), and 1.90 percentage zinc (% Zn). This intercept is hosted in Hamburg Dolomite and comprises both Carlin-type and CRD -type ("Carbonate Replacement Deposits) oxide mineralization.

A higher "bonanza" grade portion from 15.21 meters to 18.44 meters returned 3.23 meters averaging 57.16 g/t Au, 452.0 g/t Ag, 7.23 % Pb, and 11.99% Zn. This "bonanza" intercept is interpreted by the Company geologists as similar to the historic Ruby Hill mines and can be described as an oxidized carbonate-hosted, structurally and lithologically controlled gold-silver (with associated lead-zinc) mineralization. The Jewel Ridge property hosts over a dozen past producing mines and prospects over a 4kilometer strike on the Dunderberg-Windfall Belt, most worked in the late 1800's for gold, silver and lead, from shallow oxide deposits.

"Given our successful efforts to date we anticipated positive

results, but this hole has definitely exceeded our highest expectations. We are excited to aggressively continue our work program to define and expand the targets identified in 2020 by drilling, rock and soil geochemistry, magnetics and Induced Polarization geophysics and structural mapping.

Congratulations to our firstrate team of geologists and project managers." said, Mike England, CEO and President. "The discovery of a high-grade "bonanza" zone is a great success and a "game-changer" for the property and the Company, and we await assays from one remaining core hole.'





Your complete line dealer for Hitachi haulers and excavators.



Mining Branches: Elko, Nevada (775) 738-4443 Salt Lake City, Utah (801) 821-0548



Tucson, Arizona (520) 294-7677 Phoenix, AZ (602) 414-1900 Gillette, Wyoming (307) 686-7536

arnoldmachinery.com





Hecla Begins Year With Third Highest Reserves In Its History

COEUR D'ALENE, ID - "The COVID pandemic provided significant challenges to Hecla Mining Company and the mining industry; however, due to our people and the jurisdictions we operate in, Hecla exceeded the high end of our pre-COVID silver guidance by 1.4 million ounces," said Phillips S. Baker, Jr., President and CEO. "We saw modest disruptions in Quebec and Mexico; however, these did not materially impact our business. During the year we refinanced our long-term debt now due in 2028, and through solid free cash flow generation, added cash to the balance sheet, reduced our net debt, and increased dividends. As we look to 2021, we see three significant value drivers. First, with Lucky Friday running at full production, positive results from the work at Casa Berardi, and the continued consistency of Greens Creek, we expect to grow silver production and generate significant free cash flow. Silver production from our United States silver mines is expected to go from 8 million ounces in 2018 to almost 15 million ounces by 2023, further increasing Hecla's position as the most significant US silver producer. Second, we start the year with the 3rd highest reserves in our history despite disruptions to our planned exploration and definition drilling programs due to COVID-19, and we expect reserve growth in 2021 from a normal drilling program. Finally, Hecla's 2021 exploration program is following up on highgrade intercepts that have the potential to expand existing or develop new high-quality deposits in some of the world's best mining jurisdictions. Examples of this are Midas' Green Racer Sinter target where we have made a multi-ounce gold discovery in a never before drilled target and at San Sebastian's El Bronco vein where we are seeing high-grade over significant widths.

Greens Creek Mine - Alaska: The increase in silver production for the full year resulted from higher grades. The mill operated at an average of 2,236 tons per day (tpd) for the full year. Fourth quarter production was affected by a significant weather event in December when southeast Alaska was impacted by high winds and heavy rains that caused major damage in the area and communities.

The higher cost of sales in 2020 were due to higher sales volumes. The increase in per silver ounce cash costs and AISC was primarily due to higher concentrate treatment costs and lower by-product credits, on a perounce basis, with these items partially offset by lower capital spending for AISC.

For the full year of 2020, Greens Creek generated cash provided by operating activities of approximately \$182.6 million and spent \$23.0 million on additions to properties, plants and equipment, resulting in free cash flow of \$159.6 million.

Proven and Probable silver reserves decreased primarily due to COVID-19 limiting drilling to one-third of the amount drilled in 2019, changes to the mine plan, and less favorable smelter terms. This decline compares to average additions of nearly 8 million ounces per year for the past four years.

Measured and Indicated resource increased due to reclassification of reserves and Inferred resource. Measured and Indicated Mineral Resources, inclusive of Mineral Reserves is down only 3% from 2019.

Casa Berardi - Quebec: Annual gold production decreased by 10%, compared to 2019, primarily due to the Government of Quebec's COVID-19 three-week suspension order and the third quarter planned mill repairs. Fourth quarter production increased 8% over the prior year period due to more tons milled and higher grades. The mill operated at an average of 4,129 tpd in the fourth quarter 2020 and 3,699 tpd for the year.

Lower quarterly and annual cost of sales were due to stripping the East Mine Crown Pillar Pit Extension (XCMP) in 2019 partially offset by increased quantities of waste and ore extracted from the pit and higher haulage costs due to deepening of the pit. However, milling and administrative costs were higher due to costs for pre-crushing of ore to allow for increased throughput, and higher costs for mill improvements, maintenance and reagents. These factors impacted mining and milling costs, along with lower gold production, resulting in increased cash costs and AISC, after by-product credits.

For the full year of 2020, Casa Berardi generated cash provided by operating activities of approximately \$68.5 million and spent \$40.9 million on additions to properties, plants and equipment, resulting in free cash flow of \$27.6 million.

Proven and Probable gold reserves decreased approximately 10% to 1.54 million ounces. Most of the decreases were due to mining depletion and engineering changes. The 2020 drilling program at Casa Berardi was also impacted by COVID. Despite the drilling delays, approximately 85 thousand ounces were added to reserve by drilling in 2020.

Measured and Indicated gold resources increased 19% to 1.25 million ounces given exploration additions and some reclassification from reserves given engineering changes. Measured and Indicated Mineral Resources, inclusive of Mineral Reserves, increased 1% over last year.

Lucky Friday Mine - Idaho: At the Lucky Friday Mine, 2.0 million and 0.8 million ounces of silver were produced in 2020 and the fourth quarter, respectively. Lucky Friday returned to full production in the fourth quarter.

The cost of sales for the fourth quarter was \$20.9 million, and the cash cost per silver ounce4 was \$9.34. AISC5 was \$18.22 per silver ounce. Proven and Probable reserves declined 4% due primarily to mining depletion; the current mine plan is unchanged at 16 years (2036). Measured and Indicated resources for silver and lead increased 5%.

San Sebastian - Mexico: At the San Sebastian Mine, 1.0 million ounces of silver and 7,223 ounces of gold were produced. For the fourth quarter, 0.2 million ounces of silver and 1,159 ounces of gold were produced. Mining was completed in the third quarter and milling completed in the fourth quarter of 2020. The mill operated at an average of 474 tpd for the year when in production.

The lower cost of sales and silver per ounce cash costs was primarily due to lower mining costs, higher by-product, partially offset by lower silver production, and for AISC, lower capital and exploration spending.

For the full year of 2020, San Sebastian generated cash provided by operating activities of approximately \$14.4 million and spent \$0.6 million on additions to properties, plants and equipment, resulting in free cash flow of \$13.8 million.

The Company continues to explore this highly prospective land package and will evaluate further mining based on exploration results.

Nevada Operations: During the second half of 2020, all ore mined at Nevada Operations was stockpiled, with no ore milled and no production reported during the period. Mining of refractory ore at Fire Creek in areas with existing development was completed in the fourth quarter with most of the material shipped to a thirdparty processor by February 2021. The bulk test demonstrated that larger scale, more productive *Continued On Page 20*

"Building & Operating America's Underground Mines"





For more information, visit our website at: www.undergroundmining.com or call 208-338-8880



Drilling Has Commenced At The Sandman Project

VANCOUVER - Gold Bull Resources Corp. reported that surface drilling has commenced at its 100% owned Sandman Project located in Humboldt County, Nevada. The Company has defined 42 drill hole targets for approximately 8000 meters. The Company has commenced with a Phase 1 RC drill program consisting of 3000m for 17 drill holes. Phase 1 RC drill program will comprise of 17 high priority drill holes for 3000m: 1500m of resource development drilling aimed at extending known resources; and 1500m of exploration drilling, testing undrilled targets.

CEO, Cherie Leeden, said, "Our team is excited to drill test numerous high priority gold targets in our maiden drill program. We look forward to reporting our first lab results in about 4 weeks from now for the 1st hole which is designed to test the depth extension of gold mineralization that remains open at depth at our Abel Knol resource. The purpose of the proposed drill campaign will be twofold, to verify and possibly extend known mineralisation and to test areas immediately along trend from existing resources via exploration step-out holes. The initial program will comprise a roughly 3,000m rotary circulation (RC) program. A second phase of drilling for 5000m will commence after laboratory results have been received from the first phase.

The program will consist of 17 angled drill holes that range from

70 to 250m depth with an average depth of ~175m. Roughly half of the total meters (10 of 17 proposed holes) are intended to explore and potentially expand known mineral resource areas including some historical high-grade intercepts. This group of holes will target all four resource areas, including North Hill, Silica Ridge, SE Pediment, as well as Abel Knoll.





406-252-4294 P2111 4тн Avenue NGet a quote online!406-252-4812 FBillings, MT 59101duffnortonairmotorjacks.com



Building the World's Most Valued Gold Company.



With gold and copper mining operations in 13 countries, including six of the world's Top 10 Tier One gold assets and two with Tier One potential, our vision is to be the world's most valued gold mining business by finding, developing and operating the BEST ASSETS with the BEST PEOPLE to deliver the BEST RETURNS on a sustainable basis to

our owners and partners.



www.barrick.com NYSE : GOLD • TSX : ABX



Operational Performance Delivers Record Production

MELBOURNE - BHP Group Limited, Chief Executive Officer, Mike Henry, said, "BHP has delivered a strong set of results for the first half of the 2021 financial year. Our continued delivery of reliable operational performance during the half supported record production at Western Australia Iron Ore and record concentrator throughput at Escondida. Our operations generated robust cash flows, return on capital employed increased to 24 per cent and our balance sheet remains strong with net debt at bottom of our target range.

I am grateful to BHP employees and contractors for their resilience and unwavering resolve in the face of the pandemic, and for the continued support of the communities, suppliers, customers, governments and traditional owners. Their efforts have made this strong set of results possible. We further grew value in the business during the half through achieving first production at the Spence Growth Option and through the acquisition of an additional interest in Shenzi. Our other major projects in iron ore, petroleum and potash are progressing to schedule.

Creating and securing more options in future facing commodities remains a priority. In nickel and copper, we established further new partnerships, acquired new tenements and progressed exploration. Our outlook for global economic growth and commodity demand remains positive, with policymakers in key economies signalling a durable commitment to growth and signalling ambitions to tackle climate change. These factors, combined with population growth and rising living standards, are expected to drive continuing growth in demand for energy, metals and fertilisers.

Our leadership team is in place and accelerating our agenda to be safer, lower cost and more productive. We are well positioned, with a portfolio of essential products that will support a cleaner and more prosperous world while generating sustainable returns for our shareholders and value for our communities.

In the macroeconomic sphere, the deployment of vaccines in key economies, albeit with some uncertainty as to timing and efficacy, removes a material amount of downside risk to the short term demand and price outlook for our portfolio commodities. With Chinese demand looking robust and the rest of the world (ROW) on an improving trajectory, a precondition for maintaining robust price performance is in place. Where the price recovery is more nascent, there is potential for a further uplift.'

Global crude steel production

was unbalanced in the 2020 calendar year, with strong growth in China offset by a steep fall in ROW. BHP noted the momentum in ROW has been picking up markedly, with average utilisation rates now close to pre-COVID levels, while margins are benefiting from higher prices. In the 2021 calendar year, the Company anticipates a continuation of strong end-use demand conditions in China and ongoing recovery in the rest of world. Over the longterm, we anticipate that global steel production will expand at a similar rate to population growth in coming decades, with a plateau and then slow decline in China offset by growth in the developing world, led by India. Growth in pig iron is expected to trail the growth in steel, principally reflecting the higher long-term proportion of steel sourced from scrap. Efforts to decarbonise steel making are expected to proceed at different rates in different regions, based on availability of lower carbon raw feedstock (including but not exclusively scrap), the age of existing facilities, variable levels of policy support, net trade positions and differential demands for affordable steel.

Iron ore prices have been elevated since the Brumadinho tailings dam tragedy in Brazil first disrupted the market in early 2019. Conditions were particularly tight in the second half of the 2020 calendar year. The combined impact of very strong Chinese pig iron production and Brazilian exports being unable to lift materially from depressed levels in the 2019 calendar year outweighed record shipments from Australia. Our analysis indicates that before prices can correct meaningfully from their current high levels, one or both of the Chinese demand/ Brazilian supply factors will need to change materially. In the second half of the 2020s, China's demand for iron ore is expected to be lower than today as crude steel production plateaus and the scrapto-steel ratio rises. In the longterm, prices are expected to be determined by high cost production, on a value-in-use adjusted basis, from Australia or Brazil. Quality differentiation is expected to remain a factor in determining iron ore prices.

Metallurgical coal prices faced by Australian producers in the free-on-board (FOB) market have been weak. A steep, COVID-19 induced decline in ROW demand, which normally comprises around four-fifths of the seaborne trade, was the major factor driving lower prices for much of the 2020 calendar year, with China serving as the effective clearing market. However, late in the 2020 calendar year, these positions reversed, with ROW demand beginning to improve, while uncertainty about China's import policy towards Australian coals spiked. Trade flows are adjusting to account for the available opportunities. The industry faces a difficult and uncertain period ahead. Long term, the Company believes that a wholesale shift away from blast furnace steel making, which depends on metallurgical coal, is still decades in the future. That assessment is based on the bottom-up analysis of likely regional steel decarbonisation pathways, as discussed above. Demand for seaborne Hard Coking Coals (HCC) is expected to grow alongside the growth of the steel industry in HCC importing countries such as India. There is a developing mismatch between the expected evolution of customer demand and the cost-competitive growth options available to producers, which are skewed towards lower quality coals. As a result, BHP viewed the medium to long-term fundamentals for higher quality metallurgical coals as attractive.

Energy coal prices recovered from their COVID-19 induced lows late in the 2020 calendar year, assisted by a pick-up in demand due to cold weather in North Asia and a bounce in Indian industrial activity. China's policy in respect of energy coal imports remains a key uncertainty.

Continued On Page 22

ELIMINATE "BRAKE" MAINTENANCE GO OIL SHEAR TECHNOLOGY

It's Different-It's Better-It Saves Money

No more constant replacement of brake pads or disks.

No more constant brake adjustments.

No more slipping, varying torque, or missed stop position.

Unaffected by water, slag, scale, dust, rock or dirt.

Installations include overhead cranes, tension winches, coal loading/ unloading, ship loading, rail car dumpers and rail car and barge spotters.

The benefits of Oil Shear Technology

- Totally Enclosed Sealed Design
- 5 to 10 Times Longer Life
- No Adjustment—Ever!
- No Regular Maintenance*
- No Torque Fade
- Higher Cycle Rates



Call 800-829-3244

www.forcecontrol.com

FORCE CONTROL INDUSTRIES, INC. Fairfield, OHIO USA Ph: 513-868-0900 Email:

Manufactured in the USA–Used Worldwide–Since 1969

- Quick Response
- Reduced Down Time
- Operational Cost Savings
- Increased Safety

*Annual fluid change recommended for maximum performance and life.





Preliminary Gold Production Of 4.8 Million Ounces

TORONTO - Barrick Gold Corporation reported preliminary full year and fourth quarter 2020 results which indicate that it has met its 2020 guidance targets.

Preliminary gold production for the full year of 4.8 million ounces is at the midpoint of the 4.6 to 5.0 million ounce guidance range, while preliminary copper production of 457 million pounds is also within the guidance range of 440 to 500 million pounds. The preliminary Q4 results show sales for the quarter of 1.19 million ounces of gold and 108 million pounds of copper, as well as preliminary Q4 production of 1.21 million ounces of gold and 119 million pounds of copper.

Preliminary Q4 gold production was higher than Q3 2020, mainly due to a strong performance from Pueblo Viejo, the ramp-up of mining operations at Bulyanhulu and ongoing improvement at Turquoise Ridge. Preliminary Q4 gold sales were lower than Q3 2020 as third quarter sales included the export of the remaining stockpiled concentrate in Tanzania. Q4 gold cost of sales per ounce1 and total cash costs per ounce are expected to be in line with the prior quarter and gold all-in sustaining costs per ounce are expected to be 3-5% lower than in Q3 2020.

Preliminary Q4 copper production was higher than Q3 2020 following completion of plant maintenance at Lumwana in the third quarter. Preliminary Q4 copper sales were lower than the previous quarter, primarily due to the timing of shipments at Lumwana.

Q4 copper cost of sales per pound1 is expected to be 4-6% higher, Q4 copper C1 cash costs per pound2 are expected to be 10-12% higher and copper all-in sustaining costs per pound2 are expected to be 4-6% higher than Q3 2020. Driving these changes are higher operating costs at Lumwana and Zaldívar, partially offset by lower depreciation and lower sustaining capital at Lumwana.

Barrick will provide additional discussion and analysis regarding its fourth quarter production and sales when the Company reports its quarterly and full year 2020 results.

The company's address is 161 Bay St., Suite 3700, Toronto, ON M5J 2S1, (416) 861-9911, lois.wark@barrick.com, www. barrick.com.





New High-Grade Gold Zone Intersected At Pamlico

VANCOUVER - Newrange Gold Corp. announced that continued Reverse Circulation (RC) drilling at the Pamlico Project in Nevada has discovered highgrade, oxide gold mineralization approximately 85 meters east of the Merritt Zone. Hole P21-115, drilled at -60°, intersected several high-grade structures assaying up to 22.35 grams gold per metric tonne (g/t Au) over 1.5 meters surrounded by lower grade halos, very similar in nature to the Merritt Zone itself.

The uppermost zone of gold mineralization starts at 15.2 meters downhole, returning 4.38 g/t Au over 13.7 meters, including 12.47 g/t Au over 4.5 meters from 16.77 to 21.34 meters. Other high-grade intervals of note include 5.52 g/t Au over 7.62 meters from 92.99 to 100.61 meters, including 22.35 g/t Au from 94.51 to 96.04, and 13.01 g/t Au over 1.5 meters from 123.48 to 125.00 meters. The rocks between these zones are variably mineralized such that the entire 123.5 meter interval averages 1.13 g/t Au. All mineralization is within 117 meters of surface.

It is not yet clear if this new zone is continuous with the Merritt Zone, which was previously thought to have been cut off to the east in the direction of hole P21-115.

A follow-up drill program is being planned in order to determine the attitude, size and true width of the new zone which remains open to the north and east and to depth. This new mineralized zone is completely oxidized and, being so close to surface, is well within common open-pit mining limits.

"The discovery of more highgrade gold mineralization close to the Merritt Zone is an exciting development and appears to validate our hypothesis that multiple high-grade zones surrounded by halos of lower grade exist over a much broader area," said, Robert Archer, CEO. "While historic mining may have removed some gold from the hills, we are confident that other, buried zones remain to be found. Our new, intrusive-related exploration model is being validated by drilltesting of Induced Polarization (IP) targets and the extension of the geophysical survey to cover the entire property is indicating that the entire system may be several kilometers in size."

A good exploration model comprises both empirical (factbased) and genetic (theoretical) that first detected the gold-pyrite association near the western margin of the large 'Line 5' IP anomaly. These holes have now collectively defined gold mineralization starting at a consistent vertical depth of 110-120 meters and, in most cases, continuing to the bottom of the holes. The mineralization appears to be consistent over a distance of at least 200 meters east-west but has only been defined over a distance of about 50 meters in a north-south direction. Gold grades and intercept lengths appear to be increasing to the east, towards the 'main' chargeability anomaly. The uppermost zone ranges in thickness from 30 to 80 meters and highergrade sections are typically found at or near the upper and/or lower boundaries.

Individual 1.5 meter samples attain grades of up to 3.83 g/t Au while thicker intervals include 0.75 g/t Au over 18 meters within 0.4 g/t Au over 50.3 meters in hole P20-091 and 0.58 g/t Au over 35 meters in hole P20-111. Several other flat-lying zones exist below this in the 0.25-0.35 g/t Au range over thicknesses of 4.5 to 21.0 meters.

As this is the first time that this style of mineralization has been found on the property, it is unknown whether these grades and thicknesses are representative but the continuity of the mineralization and the apparent increase in grade towards an anomaly that is at least 1,000 meters northsouth and hundreds of meters wide is very encouraging. Two vertical holes, P21-120 and P21-121, recently drilled from the top of the limestone ridge overlying

the main anomaly were successful in penetrating the limestone into the underlying volcanic rocks.

The latter contain disseminated pyrite in both holes and copper mineralization was observed in hole P21-121. Assays are pending for both of these holes.







2

0

components. As field work progresses, data are fed into the model and it is constantly being refined in an iterative manner in order to maximize the odds of success.

Given the association of gold mineralization with pyrite at Pamlico and the depth of oxidation, IP has been critical in detecting remnant pyrite below the oxidation level that could give clues as to the distribution and even the origin of the pyrite-gold mineralization. To this end, the RC drill holes targeting shallow IP anomalies in the 'Line 5 area' of the property have confirmed the presence of fine-grained pyrite and a relatively flat-lying series of 'stacked' zones of gold mineralization.

Drill holes P20-111 and 112 and P21-113 and 116 were all drilled in the area of hole P20-091



CONTINUED FROM PAGE 14 Hecla Begins Year With Third Highest Reserves In Its History

mining methods could be applied successfully to this material. Ground conditions were as good or better than expected and water in the test area was readily managed. The bulk test refractory ore is being processed by a third party through a tolling agreement. While the processing is not yet complete, the recovery information to date follows the grade-recovery curve established through bench testing. Metal prices increased significantly since the tolling agreement was signed, and it is no longer attractive for the third party to displace their own feed to toll. Discussions are underway with another processor with surplus capacity. Fire Creek is expected to be placed on care

and maintenance in the second quarter of 2021.

Proven and Probable silver and gold reserves dropped 11% for the year to 188 million ounces of silver and 2.4 million ounces of gold. Lead and zinc reserves dropped 9% and 12% to 740 thousand tons of lead and 886 thousand tons of zinc. Due to the Company's focus on essential mining during implemented COVID-19 protocols, the 2020 exploration programs were disrupted company-wide with approximately one-third less drilling achieved at Greens Creek than in 2019 coupled with significant third-party assay laboratory delays.

Measured and Indicated silver

ounces increased 5% to a record 228 million ounces, an increase of 10.3 million ounces over 2019 with increases due to limited drilling and reclassification of reserve at Greens Creek and remodeling at Lucky Friday. Measured and Indicated gold ounces decreased 37% to 3.7 million ounces, a reduction of 2.1 million ounces, due to reclassification of resources in Nevada and the Heva Hosco project, respectively. Measured and Indicated base metals increased overall, with lead increasing 5% for a total of 921 thousand tons and zinc increasing 2% at 1,132 thousand tons.

Inferred silver resources are essentially unchanged from last



year with a slight drop of 1% to 454 million ounces. Inferred gold resources increased 12% to 5.5 million ounces due to reclassification of higher resource classes in Nevada and the increased Inferred resource overall at the Heva Hosco Project. Inferred base metal resources are down slightly with a 3% change in lead to 467.6 thousand tons and a 5% change in zinc to 425.1 thousand tons. Base metal changes are mostly due to small losses and reclassification to higher classes at Greens Creek and remodeling of the Hugh Zone polymetallic zone at the San Sebastian.

Fourth quarter exploration (including corporate development) expenses were \$8.0 million, over half of the full year expenditures and an increase of \$5.6 million compared to the fourth quarter 2019 primarily due to increased activity and focus on Midas, Casa Berardi, and San Sebastian.

During the quarter, there were two new discoveries: Green Racer Sinter at Midas and the 160 Zone eastern extension at Casa Berardi.

At Midas, four core rigs intersected mineralization in five of seven targets. At the Green Racer Sinter, a target with no previous drilling located two miles east of the main mine, detailed surface mapping identified an outcrop of spicular geyserite sinter with anomalous gold. The deeper holes are encountering the same favorable host rocks as those of the historic Midas mine where mineralization had an average grade of 0.81 oz/ton gold and 11.3 oz/ton silver over an average width of 4.0 feet.

Exploration: At Casa Berardi, a new discovery was made in the 160 Zone 500 feet east of the current resource blocks and the zone open in all directions. The discovery drillhole intersected 0.32

oz/ton gold over 9.5 feet estimated true width including 1.16 oz/ton gold over 2.0 feet estimated true width.

San Sebastian exploration focused on the El Tigre and El Bronco veins discovered under thick soil cover this year. So far, the veins are strong structures that in places have over 28 feet of true thickness, almost a mile of strike length down to 1,000 feet below the surface and are open. The best results to date include 44.5 oz/ton silver and 0.22 oz/ton gold over 9.5 feet estimated true width in the El Bronco vein and 16.2 oz/ton silver and 0.09 oz/ton gold over 3.5 feet estimated true width in the El Tigre vein. Exploration expenditures for 2021 are estimated to be \$30 million. Greens Creek and Casa Berardi programs should each be about 15% of the total expenditures with surface programs in addition to their normal underground exploration. San Sebastian should also represent 15% of the exploration spend, building on the developing resources of the El Bronco, El Tigre, and El Toro veins. Nevada exploration is targeted at 25% of the total, with the majority spent at Midas. At Hollister, exploration of the Hatter Graben is expected to be advanced by further developing the decline in order to test a portion of the Hatter Graben resource and explore additional Hatter Graben veins further to the south. At Fire Creek and Aurora, any drilling programs will occur later in the year following further target definition.

Almost 10% of the exploration budget is targeted for Kinskuch in an effort to expand the 2018 discoveries that established a strike length of 2.2 miles of silver, zinc, and lead mineralization offsetting drillhole intercepts such as 9.3 oz/ton silver, 6.5% zinc, and 2.3% lead over 8.2 feet that is open in all directions. The Heva Hosco program will spend about 5% of the total with the majority of the drilling offsetting a 2018 intercept in a highgrade quartz vein grading 0.84 oz/ton gold over 7.6 feet (drilled length).

Pre-development - Montanore/ Rock Creek: Pre-development spending was \$0.6 million in the fourth quarter and \$2.4 million for the full year 2020, principally to advance the permitting at Montanore/Rock Creek. At Montanore, the Kootenai National Forest's (KNF) final Supplemental Environment Impact Study (SEIS) and Record of Decision (ROD) are expected later in 2021. At Rock Creek, the KNF partially approved the Plan of Operation to reflect the ROD and the Montana Department of Environmental Quality approved modifications to the existing Exploration License to match the ROD. Decisions on litigation challenging decisions of the US Fish and Wildlife Service and the KNF are expected later in the year.

METALOCK® CORPORATION

ECRS

Engineering Affiliate of

"The Technology Leader in the Crack Repair Industry"

Engineered Casting Repair Services, Inc

Analysis and Repair of Cracked and Eroded Ball and SAG Mill Trunnions, and Heads.

Any Crack...Anywhere...Any Time

Phone: (225) 791-8900 Fax: (225) 791-8965 email: metalock@eatel.net

You Know It's Cracked - How Do You Fix It?

Formy Brean





We are excited to let you know our website has been revamped.

Original Creations, Inc. is family-owned and operated right here in Helper, UT. Since our company opened in 1980, we've treated every customer like they matter. Other companies may offer similar services, but our services come with a personal touch. Celebrating 40 Years in business



Your source for mining gifts, mining related artwork, safety awards, retirement gifts, mine rescue awards, and so much more!







original-creations.com

1310 W. 2060 N. • Helper, UT 84526 Phone: (435) 637-0159 • Email: danny@original-creations.com



The Lone Star Operation Production Continues To Ramp-up On Schedule

PHOENIX, AZ - Freeport-McMoRan Inc., President and Chief Executive Officer, Richard C. Adkerson, said, "During 2020, our global team responded to the challenges of the pandemic in an exceptional fashion, safeguarding our people, communities and assets as we executed and delivered on our clearly defined strategy. Together we achieved strong operating performance and project execution, establishing a solid foundation for future growth in sales volumes and cash flows. We are enthusiastic about the future prospects for our business based on the positive outlook for the markets we serve, our long-lived and high-quality copper assets, our seasoned and highly motivated global organization and the critical role of copper to the technologies necessary to deliver clean energy and support the global transition to a low-carbon economy."

Fourth-quarter 2020 copper sales of 866 million pounds were 3 percent higher than the October 2020 estimate of 840 million pounds of copper, primarily reflecting higher sales from Cerro Verde and Indonesia. Fourthquarter 2020 copper sales were lower than fourth-quarter 2019 sales of 906 million pounds of copper, primarily reflecting previously announced operating plan adjustments, partly offset by higher mining rates and copper ore grades in Indonesia. Fourth-quarter 2020 gold sales of 293 thousand ounces were 9 percent higher than the October 2020 estimate of 270 thousand ounces of gold, primarily reflecting higher gold ore grades in Indonesia. Fourth-quarter 2020 gold sales were lower than fourth-quarter 2019 sales of 317 thousand ounces of gold, primarily reflecting timing of shipments in fourth-quarter 2019. Fourth-quarter 2020 molybdenum sales of 21 million pounds were in line with both the October 2020 estimate and fourth-quarter 2019 sales of 22 million pounds.

Consolidated sales volumes for the year 2021 are expected to approximate 3.8 billion pounds of copper, 1.3 million ounces of gold and 85 million pounds of molybdenum, including 825 million pounds of copper, 275 thousand ounces of gold and 20 million pounds of molybdenum in firstquarter 2021. Projected sales volumes are dependent on operational performance, continued progress of the ramp-up of underground mining at PT Freeport Indonesia (PT-FI), impacts and duration of the COVID-19 pandemic, timing of shipments, and other factors.

FCX's North America operating sites continue to focus on strong execution of operating plans. Production from Lone Star continues to ramp-up on schedule and is expected to exceed 200 million pounds of copper for the year 2021. FCX plans to advance studies for potential expansions and long-term development options for its large-scale sulfide resources at Lone Star. The Company's North America Copper Mines are 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 percent undivided joint venture interest in Morenci using the proportionate consolidation method.

Continued On Page 25

CONTINUED FROM PAGE 17 BHP Constructive Outlook

Copper prices have been strong in recent times. With ROW demand recovering and China continuing to perform well, the short term outlook for demand is constructive. On the supply side, term risks from the escalation of COVID-19 cases in Chile, and the fact that a number of wage negotiations at Chilean mines are scheduled for the current calendar year, spread across both halves. Longer term, end-use demand is expected to be solid, while broad exposure to the electrification mega-trend offers attractive upside.

Long term prices are expected to also reflect grade decline, resource depletion, water constraints, the increased depth and complexity of known development options and a scarcity of high quality future development opportunities after a poor decade for industry-wide exploration in the 2010s.

Nickel prices have been driven by positive sentiment towards progrowth assets, supply uncertainty and a strong rebound from the battery-electric vehicle (EV) complex in the second half of the 2020 calendar year. Longer term, it is believed that nickel will be a substantial beneficiary of the global electrification mega-trend and that nickel sulphides will be particularly attractive given the relatively lower cost of production of battery-suitable class-1 nickel than for laterites, which are expected to set the long-run nickel price. This view is supported by assessment of the likely rate of growth in EVs and of the likely battery chemistry that will underpin this. BHP has revised the already aggressive long run EV ranges to reflect even more supportive policy, such as accelerated bans for internal combustion engine vehicles in Europe, the policy platform of the Biden administration and net zero objectives in China, Japan and South Korea.

Crude oil prices have recovered to around US\$60 per barrel range. The base case is that prices should build upon their recent recovery, but the pace of gains is likely going to be modest initially given potential headwinds from currently curtailed supply returning. However, if looked beyond this phase, the bottom-up analysis of demand, allied to systematic field decline rates, points to a long run structural demand-supply gap. Considerable investment in conventional oil is going to be required to fill that gap. The medium to long term supply deficit has been amplified by the global retreat from capital spending across the industry in response to the pandemic.

Deepwater assets are the most likely major supply segment to balance the market in the longer term. The price expectation required to trigger investment in deepwater projects is expected to be significantly higher than the prices faced today.

The Japan-Korea Marker price for LNG has been extraordinarily volatile. Spot prices hit record lows as COVID-19 demand destruction hit a market already facing excess supply and large storage builds in the first half of the 2020 calendar year. The market then reversed course sharply during the northern winter, printing record high prices. The winter price squeeze came about due to disrupted supply, strong power and heating demand in North Asia, shipping congestion preventing US supply moving promptly into the Pacific as well as high freight rates.

Longer term, the commodity offers a combination of systematic base decline and an attractive demand trajectory. Within global gas, LNG is expected to gain share. Against this backdrop, LNG assets advantaged by their proximity to existing infrastructure or customers, or both, are expected to be attractive. Potash stands to benefit from the intersection of a number of global megatrends: rising population, changing diets and the need for the sustainable intensification of agriculture. It is anticipated the trend demand growth of 1.5 to 2.0 Mt per year (between two and three per cent per annum) through the 2020s. This would progressively absorb the excess capacity currently present in the industry, with opportunity for new supply expected by the late 2020s or early 2030s. More immediately, BHP estimates that producer sales hit a record 79 Mt annualised in the June quarter of 2020.



and Field Trips

December 5-10, 2021

Nugget Casino Resort Sparks, Nevada, USA

Call for Short Courses & Technical Sessions Contact Pat Heywood pheywood@miningamerica.org

For Exhibit Booth and Core Shack Contact Mike Heywood mheywood@miningamerica.org



When business brings you to town, make time to explore Elko, Nevada's wide open spaces!









THE INTERNET CONNECTION DIRECTORY

CONTRACT MINING

Ames Construction www.amesconstruction.com info@amesconstruction.com

CONSULTANTS - MINERAL INDUSTRY

Golder Associates www.golder.com miningsolutions@golder.com HEAVY MINING EQUIPMENT

Wagner Equipment Company www.wagnerequipment.cat.com

MATERIAL HANDLING SYSTEMS MINE PLANNING • MODELING SOFTWARE



STEEL FABRICATORS - PIPE

Mill Man Steel, Inc. www.millmansteel.com kevin@millmansteel.com

Naylor Pipe Company www.naylorpipe.com sales@naylorpipe.com

TUNNELING - RAISEBORING

Cowin & Company, Inc.

Independent Mining Consultants

www.imctucson.com imc@imctucson.com



www.KnightPiesold.com

CRUSHERS - MINING AND AGGREGATE

PR Engineering Ltd. www.prengineering.com info@prengineering.com

HEAP LEACH/TAILINGS DAM GEOTECHNICAL/ENVIRONMENTAL

Golder Associates www.golder.com miningsolutions@golder.com Independent Mining Consultants www.imctucson.com imc@imctucson.com

MINING/EXPLORATION COMPANIES

Freeport-McMoRan www.fcx.com

General Moly www.generalmoly.com

Newmont Mining Corporation www.newmont.com

PIPE SYSTEMS

Naylor Pipe Company www.naylorpipe.com sales@naylorpipe.com www.cowin-co.com jcowinjr@cowin-co.com

RAISEBOR www.raisebor.com rsidwell@raisebor.com

UNDERGROUND CONSTRUCTION AND MAINTENANCE

Harrison Western Construction Corporation www.harrisonwestern.com info@harwest.com

USED/NEW HEAVY EQUIPMENT

Arnold Machinery Company www.arnoldmachinery.com

Cashman Equipment Company www.cashmanequipment.com

For your company's listing in the Internet Connection Directory please contact: The Mining Record at: 800-441-4748 • Ph: 303-663-7820 • advertising@miningrecord.com P.O. Box 1630, Castle Rock, Colorado 80104-6130 USA

www.miningrecord.com



CONTINUED FROM PAGE 22 FCX Has Significant Reserves/Future Development Opportunities

In January 2021, FCX restarted mining activities at the Chino mine at a reduced rate of approximately 100 million pounds of copper per year (approximately 50 percent of capacity).

South America Mining during fourth-quarter 2020, Cerro Verde, in Peru, continued to increase milling rates to an average of 373,200 metric tons of ore per day while operating consistent with the April 2020 revised operating plans and under strict COVID-19 restrictions and protocols. FCX expects Cerro Verde's mill rates to average approximately 360,000 metric tons of ore per day in 2021 with the potential to ramp-up to pre-COVID-19 levels approximating 400,000 metric tons of ore per day as COVID-19 restrictions are lifted. El Abra, in Chile, plans to increase operating rates during 2021 to pre-COVID-19 levels, subject to ongoing monitoring of public health conditions in Chile. Incremental copper production associated with increasing El Abra's stacking rates from 65,000 metric tons of ore per day to over 100,000 metric tons of ore per day, approximates 70 million pounds per year beginning in 2022. Copper sales from South America mining are expected to approximate 1.0 billion pounds for the year 2021. Consolidated copper sales volumes from South America of 260 million pounds in fourth-quarter 2020 were lower than fourth-quarter 2019 copper sales volumes of 345 million pounds, primarily reflecting lower mining rates associated with COVID-19 protocols and the April 2020 revised operating plans.

PT-FI operates one of the world's largest copper and gold mines at the Grasberg minerals district in Papua, Indonesia. PT-FI produces copper concentrate that contains significant quantities of gold and silver. FCX has a 48.76 percent ownership interest in PT-FI and manages its mining operations. Under the terms of the shareholders agreement, FCX's economic interest in PT-FI approximates 81 percent through 2022. PT-FI's results are consolidated in FCX's financial statements. The ramp-up of underground production at the Grasberg minerals district in Indonesia continues to advance on schedule. During fourth-quarter 2020, a total of 56 new drawbells were constructed at the Grasberg Block Cave and Deep Mill Level Zone (DMLZ) underground mines, bringing cumulative open drawbells to over 370. Combined average production from the Grasberg Block Cave and DMLZ mines approximated 85,000 metric tons of ore per day during fourth-quarter 2020 (including approximately 95,000 metric tons of ore per day during the month of December). PT-FI expects production for the year 2021 to approximate 1.4 billion pounds of copper and 1.4 million ounces of gold, which is nearly double 2020 levels. The successful completion of this ramp up is expected to enable PT-FI to generate average annual production for the next several years of 1.55 billion pounds of copper and 1.6 million ounces of gold at an attractive unit net cash cost, providing significant margins and cash flows.

development projects is expected to average approximately \$0.9 billion per year for the two-year period 2021 through 2022, net of scheduled contributions from PT Indonesia Asahan Aluminium (Persero) (PT Inalum). In accordance with applicable accounting guidance, aggregate costs (before scheduled contributions from PT Inalum), which are expected to average \$1.1 billion per year for the two-year period 2021 through 2022, will be reflected as an investing activity in FCX's cash flow statement, and contributions from PT Inalum will be reflected as a financing activity.

As a result of COVID-19 mitigation measures, there have been disruptions to work and travel schedules of international contractors and restrictions on access to the proposed physical site of the new smelter in Gresik, Indonesia. Accordingly, during 2020, PT-FI notified the Indonesia government of delays in achieving the completion timeline of December 2023. PT-FI continues to discuss with the Indonesia government a deferred schedule for the project as well as other alternatives in light of the ongoing COVID-19 pandemic and volatile global economic conditions.

In connection with its commitment to develop additional smelter capacity in Indonesia, PT-FI has advanced discussions with the majority owner of the existing smelter in Gresik, Indonesia (PT Smelting), which is 25-percent owned by PT-FI, regarding an expansion of the smelter to increase smelter concentrate treatment capacity by approximately 30 percent (300,000 metric tons of concentrate per year). Commercial and financial arrangements for this potential project are being advanced.

An expansion of PT Smelting would reduce PT-FI's smelter development commitment from 2.0 million metric tons of concentrate per year to 1.7 million metric tons per year. PT-FI continues to evaluate a new greenfield smelter project located in East Java in parallel with discussions with a third party to develop new smelter capacity at an alternate location in partnership with PT-FI.

At the two wholly owned molybdenum mines in Colorado the Henderson underground mine and the Climax open-pit mine, had a combined production of highpurity, chemical- grade molybdenum concentrate, which is typically further processed into value-added molybdenum chemical products. The majority of the molybdenum concentrate produced at the Henderson and Climax mines, as well as from FCX's North America and South America copper mines, is processed at FCX's conversion facilities. Production from the molybdenum mines of 5 million pounds of molybdenum in fourthquarter 2020 approximated fourthquarter 2019.

FCX's mining exploration activities are generally associated with its existing mines, focusing on opportunities to expand reserves and resources to support development of additional future production capacity. Exploration results continue to indicate opportunities for significant future potential reserve additions in North America and South America. Exploration expenditures for the year 2021 are expected to approximate \$34 million, consistent with the year 2020. FCX has long-lived reserves and a significant resource position in its existing portfolio.

FCX has significant reserves, resources and future development opportunities within its portfolio of mining assets. FCX's preliminary estimated consolidated recoverable proven and probable reserves from its mines include 113.2 billion pounds of copper, 28.9 million ounces of gold and 3.71 billion pounds of molybdenum.



PT-FI's estimated annual capital spending on underground mine



Contact us for full details on SLABBER.[®]

(801) 328-3733

ROCK TOOLS, INC. P.O. BOX 58196 SALT LAKE CITY, UT 84158



Magnetic Coverage With Drone Survey At Majuba Hill

VANCOUVER - Bam Bam Resources Corp. reported that a drone magnetic survey by Zonge International, Inc. is underway at the Majuba Hill Porphyry Copper Project in Pershing County, Nevada.

The magnetic coverage is being expanded because of the

very encouraging results from a 2018 ground magnetic survey over part of the project area.

High-grade copper values reported from the 2020 Bam Bam drilling program are along the southern edge of the eastern magnetic low.

Porphyry-style pyrite, pyr-

rhotite, chalcopyrite, and arsenopyrite associated with quartz-sericite-pyrite (phyllic) and possible potassic alteration was logged in the recent deep core holes and is highly correlative with the 2018 survey.

The detailed magnetic geophysical information from the drone survey will provide guidance for expanding the mineralization at Majuba Hill.

David Greenway, President & CEO, said, "The porphyry copper fingerprint we are seeing in the geophysical data is very encouraging. I am pleased that we can get the field crews on the project and advance this phase of our 2021 exploration program.

Majuba is emerging as a large-scale copper project and working in a safe jurisdiction like Nevada allows Bam Bam to be very effective with our exploration dollars."



DRILLING SERVICES THROUGHOUT THE WESTERN UNITED STATES

NATIONALEWP.COM 801.580.5905



MINExpo INTERNATIONAL® 2020 is Rescheduled to September 13-15, 2021.

The National Mining Association (NMA), the sponsor of MINExpo INTERNATIONAL® 2020 is excited to announce that the 2020 show has been rescheduled to September 13-15, 2021, at the Las Vegas Convention Center, Las Vegas, NV, USA.

Our highest priority is the health, well-being and safety of exhibitors, attendees, stakeholders and their respective families and colleagues, as well as our event partners in Las Vegas. Accordingly, we will develop and institute protocols to ensure that the global mining community is able to meet safely and hold an exciting, effective event in September 2021. We are committed to regular communications with exhibitors and attendees regarding the preparation and holding of MINExpo INTERNATIONAL® 2021.

Thank you for your cooperation and patience as we worked through the complicated rescheduling process, and for your continued engagement and participation in MINExpo INTERNATIONAL®.

Exhibitors in MINExpo INTERNATIONAL® 2020 were to receive an email on September 3, 2020 outlining the options available to those exhibitors regarding participation in the rescheduled MINExpo INTERNATIONAL® 2021. Every exhibitor was to respond by November 23, 2020. If you did not receive an email, please contact Show Management at minexpo@heiexpo.com.

MINExpo INTERNATIONAL® 2021 registration, housing information as well as updated information for exhibitor planning will be posted in early 2021.

MINExpo INTERNATIONAL® is sponsored by the National Mining Association

NMA is the only national trade association that represents the interests of mining before Congress, the administration, federal agencies, the judiciary and the media. NMA provides a clear voice for U.S. mining. nma.org





METALLURGICAL PROCESS TESTING, FEASIBILITY, DESIGN & CONSTRUCTION FOCUSED ON THE SUCCESS OF YOUR PROJECT



Since 1972, Kappes, Cassiday & Associates (KCA) has provided process metallurgical services to the international mining industry. KCA specializes in all aspects of heap leach and cyanide processing, including laboratory testing, project feasibility studies, engineering design, construction, and operations management.

While primarily known for its heap leach expertise, KCA has designed and built on an EPCM basis, many process plants throughout the world. KCA's staff includes experienced professionals with design capabilities in a wide range of metallurgical processes. At the facility in Reno, Nevada KCA maintains a pilot scale HPGR unit for completing both preliminary as well as feasibility level crushing test work. KCA has engineered both complex acid leach processes as well as complex oxidative processes for precious and base metal ore beneficiation.

For several years, KCA has routinely expanded its client base and service capabilities. KCA occupies a 3800 square meter building in Reno, NV, which greatly increases KCA's capacity for engineering, manufacturing, purchasing, warehousing, and testing. Florin Analytical Services, part of the KCA group, operates as an independent commercial analytical lab, providing high quality, reliable assays.

www.kcareno.com

7950 Security Circle, Reno, NV 89506 · Email: kca@kcareno.com · Tel: (775) 972-7575 · Fax: (775) 972-4567