THE INDUSTRY'S LEADING NEWSPAPER SINCE 1889

THE VOICE OF THE MINING INDUSTRY



# ONTARIO PureGold Mine Transitions To Producer With First Gold Pour

VANCOUVER - "The Pure-Gold Mine has come to life. With our first gold pour, we have transitioned to producer, and delivered on our promise to build Canada's newest gold mine in the heart of Red Lake Ontario, on budget and on schedule," said Darin Labrenz, President and CEO of Pure Gold Mining Inc. "To build a mine at any time requires a complete team effort comprised of dedicated, driven, and focussed individuals. To do so under the unique challenges of 2020 speaks to the quality and dedication of the entire team. With this first gold bar, we are now focussed on ramping up the operation to steady state production as we continue to build a long-life growth company in Red Lake."

With the commencement of production at the PureGold Mine, activities at site are now concentrated on optimizing the operation, with Commercial Production anticipated by the end of Q1 2021 at which time the Company will be providing guidance. PureGold will also continue to pursue its aggressive growth strategy in 2021, with ongoing exploration drilling from both surface and underground, an update of mineral resources to include drilling completed over the last two years, and incorporation of significant improvements in mine design and mine plan.

The PureGold Mine is located in one of the world's richest and most prolific gold mining districts. Located primarily on patented claims, there is yearround access to the property via Ontario Highway 618. Numerous



With the commencement of production at the PureGold Mine, activities at site are now concentrated on optimizing the operation, with Commercial Production anticipated by the end of Q1 2021. Located primarily on patented claims, there is year-round access to the property via Ontario Highway 618. Numerous secondary roads transect the property providing access for exploration and development.

secondary roads transect the 4,700-hectare property providing simple access for exploration and development. The district also benefits from scheduled commercial air services to the Red Lake Airport via Thunder Bay and Winnipeg.

The underground operation utilizes a combination of longhole stoping, conventional cutand-fill, and mechanized cut-andfill mining methods. Processing includes conventional crushing and grinding, followed by gravity concentration to recover freemilling gold, followed by preoxidation, leaching, carbon in pulp circuit and electrowinning, and refining to produce doré gold. PureGold's high-grade ore body is an exceptional foundation on which to build a multi-generational iconic gold mining company. The Mine has a 2.1-millionounce Indicated Resource (7.2Mt at 8.9 g/t gold) and a 0.5-millionounce Inferred Resource (1.9Mt at 7.7g/t gold). Mineral resources are inclusive of Probable Mineral Reserves of 1 million ounces of gold grading 9g/t (in 3.5 million tonnes). The Company's Growth Strategy is to continue the highlyfocused and highly-successful exploration and expansion drilling program across its 100%-owned, 47-km2 property located in the Red Lake Gold District – a property which already hosts the district's #2 historical gold producer.

More than 1.3 million metres of drilling, with an average drill hole span of just over 6 metres between drill holes used to define our mineral reserves has delineated a 7-kilometre-long Gold Corridor.

More than 30% of PureGold is owned by three global gold leaders: Eric Sprott, gold visionary and investor, who owns over 10% of PureGold; the world's third-largest gold producer, AngloGold Ashanti, which owns 16% of PureGold; and Newmont, the largest gold producer in the world.

The leadership and management teams have deep roots and experience in the geology of the Red Lake gold district, and direct hands-on experience from years of on-site exploring, mining, and producing high-grade gold in this area. The company's address is Suite 1900, 1055 West Hastings, Vancouver, BC V6E 2E9, (604) 646- 8000, info@puregoldmining.ca, web: puregoldmining.ca.

Dated Material – RUSH

# News

Nine reverse circulation drill holes completed at Kinsley..2

Program confirms Boulder Vein open at depth.....2

Arizona and Nevada projects significantly advanced......3

New Carlin-type oxidized gold discovery at Robber Gulch..5

Drilling expands mineral footprint at Pamlico Project......7

Core-reverse circulation holes complete at Green Springs..9

Binding letter of intent signed for extensive gold assets..11

Ambler road project final authorizations received......15

Buckreef Gold Project to advance with new plan.....17

Metallurgical testing begins at Happy Cat property......18

Commercial production at Relief Canyon Mine......18

### **Program Continues At Perron Property**

MONTREAL - Amex Exploration Inc. reported mineral exploration activities on the Perron property continues with 10 drill rigs in operation.

The Company continues adhering to the safety recommendations from the public health experts.

In addition, the Company is currently waiting on assay results from 9,000 samples completed in 2020. Visible gold has been intersected in drills holes each day since drilling resumed this month.



# **Nine Reverse Circulation Drill Holes Completed At Kinsley Project**

INDEPENDENT MINING CONSULTANTS, INC.

- Surface and Underground Mine Evaluation
- Exploration Project Development
- Mine Design and Planning
- Production Scheduling and Strategic Planning
- Resource Modeling / Reserve Estimation
- Evaluation of Expansions or Acquisitions

www.imctucson.com Tel: (520) 294-9861 VANCOUVER - New Placer Dome Gold Corp. report assay results for the initial nine reverse circulation (RC) drill holes completed during 2020 at its flagship Kinsley Mountain Gold Project in Nevada. Eight of the nine drill holes had significant gold intercepts and have the potential to increase mineral resources in several different zones.

The recently completed 2020 Kinsley Mountain RC and diamond drill campaign comprised 49 drill holes totaling 17,970 metres (39 RC holes for 13,610 metres, and 10 diamond drill holes for 4,360 metres), and tested five target areas within the greater resource area. Assay results from the remaining 40 holes are still pending. Drill holes were selected to test extensions to existing resource areas as well as undrilled, high conviction targets.

Highlights include: 2.63 g/t Au (sulphide) over 38.10 metres; including 10.22 grams-per-tonne gold (g/t Au) (sulphide) over 6.10 metres in KMR20-017; 3.38 g/t Au (oxide) over 21.34 metres; including 5.78 g/t Au over 6.10 metres in KMR20-016; 5.15 g/t Au (oxide) over 10.67 metres in KMR20-004; 4.83 g/t Au (sulphide) over 6.10 metres and 1.74 g/t Au (sulphide) over 7.62 metres in KMR20-008; and 1.15 g/t Au (sulphide) over 6.10 metres in KMR20-007; and 1.19 g/t Au (oxide) over 16.76 metres in KMR20-005; and 0.51 g/t Au (oxide) over 18.29 metres in KMR20-006.

Max Sali, CEO and Founder, said, "We are extremely encouraged by the results from the initial nine Kinsley drill holes, which reinforce the exceptional exploration potential of the Kinsley Mountain Project. With

an existing resource including 302,000 high-grade indicated ounces of gold grading 6.11 g/t at the Western Flank Zone, and high-grade gold in our new holes on the margins of the deposit, we look forward to the potential of resource growth driven by the results of the remaining 40 drill holes which targeted proven and new areas at Kinsley. With the 2020 drilling program now complete and analysis of most samples now underway at the laboratory we look forward to continued news flow in the months ahead."

### Program Confirms Boulder Vein Open At Depth, Extends Further

VANCOUVER - Blue Lagoon Resources Inc. reported that recently completed drilling on the Company's Dome Mountain Gold Project, shows potential to increase the extent of the known gold mineralization down dip from the current extent of the known resource based on deep mineralization encountered in hole DM-20-139 and, along strike to the east based on high grade gold intercepts in hole DM-20-114 (the furthest East mineralized intercept on the Boulder Vein completed on the project to date).

"The recently completed drill program was successful with regards to infill and, most significantly, proving the concept of the mineralized Boulder Vein continuing at depth and, along strike to the east." said Chief Geologist, Bill Cronk. "The high-grade intercepts in holes DM-20-139 and DM-20-114 offer near term prospectivity to increase the overall resource significantly, both at depth and along strike.

Additionally, the intercept from hole DM-20-114 appears to be substantiated by a discreet Mag anomaly identified in our recently completed airborne Mag survey and offers a clear target for further drilling along strike to the east."

DM-20-139 was drilled vertically to a depth of 595.88 meters and intercepted the Boulder Vein at 338 meters and hit 3.13 meters running 17.69 g/t Au and 70.40 g/t Ag (including 0.65 meters running 48.4 g/t Au and 95 g/t Ag).

This intercept is the deepest intercept to date on the Boulder Vein. The recently filed technical report outlines the Boulder Vein as 1000 meters in strike length and 200 meters of downdip extent.

The high grade gold intercept in hole DM-20-139 is 150 meters deeper than the lowest elevation of the Boulder Resource. This hole proves the veracity of a mineralized downdip exploration model and, the 2021 drilling program scheduled to commence this month will prioritize further drilling at depth.

Engineered Casting Repair Services, Inc. Engineering Affiliate of METALOCK® CORPORATION "The Technology Leader in the Crack Repair Industry" Any Crack...Anywhere...Any Time

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

You Know It's <u>Cracked</u> - How Do You Fix It?

Jommy Brea

/

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 NEWSTM

Volume 132, Number 1

### **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 Facebook, 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 information 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.



# Arizona And Nevada Projects Have Significantly Advanced

VANCOUVER - Northern Lights Resources Corp. reported that it has significantly advanced the Company's two flagship properties - the Secret Pass Gold Project in Arizona and the Medicine Springs Silver Lead Zinc project in Nevada.

During 2020, Northern Lights completed a Phase 1 Exploration program at Secret Pass. The Phase 1 exploration program included: Evaluation and compilation of historic geological information into a GIS system; Completion of drone aeromagnetic and photogrammetry mapping survey over the entire mineral claim area; Reinterpretation of historic IP survey; Geological and drainage mapping over entire mineral claim area; Completion of 400 pan concentrate / screen concentrate sampling program over selected areas of alteration throughout the license area (assays pending).

This survey will show background gold presence and highlight additional target zones. In additional to the Tin Cup and FM Zones, Northern Lights has identified over additional 20 prospective targets for further exploration at Secret Pass.

Northern Lights is currently permitting the Phase 1 diamond drill program, 11 holes for a total 1,900 meters, at Secret Pass.

The processing of the Phase 1 drill permits has been slowed by Covid-19 Pandemic but the Company expects to receive the required permits in the near future.

This initial Phase 1 drill program will focus on confirming the presence of high-grade gold mineralization identified by historic drilling and providing structural information as well as to test for the potential of continued mineralization at depth at Tin Cup.

Also, the Phase 1 program will include two holes at the newly identified Fiery Squid zone located approximately 2 km to the north of the Tin Cup zone. A historic grab sample from the dumps adjacent to the shaft at Fiery Squid yielded 6 g/t Au.

The Fiery Squid zone is an intense sericite-altered, quartzveined set of contacts developed between a swarm of rhyolite intrusions and host andesite situated in the middle of a 1000 x 500 metre zone of iron oxide alteration.

The Company is currently active preparing the workshop in Kingman Arizona that will be used for core cutting and logging.

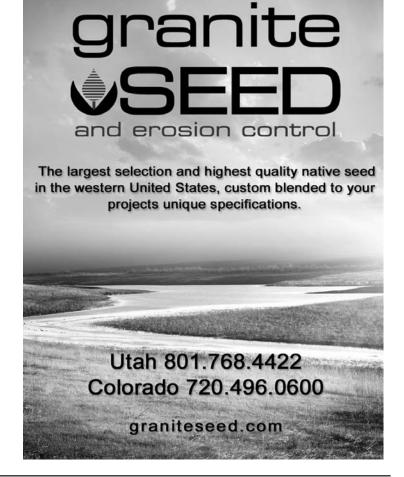
Once drill permits have been granted, Northern Lights will immediately mobilize Altar Drilling from Tucson to the project site to commence the Phase 1 drill program. Secret Pass Project site is accessible year around for drilling and exploration activities.

The Medicine Springs Project, located in Elko County Nevada has potential to host a large-scale silver rich carbonate replacement deposit.

Work completed to date by Northern Lights on the Medicine Springs project includes an aeromagnetic survey, a 800 sample ionic soil geochemistry survey and detailed geological mapping.

Northern Lights has identified a length of 3,000 m x 700m width silver zinc lead anomaly that will be a focus of upcoming drilling on the project. Last October, Northern Lights announced that it had entered into a Option/Joint Venture Agreement with Reyna Silver. The geological team at Reyna Silver is led by Dr. Peter Megaw, with proven expertise and track record of success in developing carbonate replacement deposits.

Under the terms of the Agreement, Reyna Silver can earn up to 80% equity in the Medicine Springs Project by completing exploration expenditures of US\$2.4 million and paying a cash payment of US\$1m to Northern Lights by no later than December 31, 2023. Northern Lights has a free carry for all project expenditures until Reyna Silver have spent a minimum of US\$4 million on the project.



# Cowin & Company, line 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



### 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





# **Beartrack-Arnett Project Results Show Potential To Build-Advance**

TORONTO - "Despite difficult operating conditions through most of 2020, Revival Gold's operating team is to be commended for delivering a zerolost time year while the company continued to grow and derisk its flagship Beartrack-Arnett Gold Project. A significant expansion of the Mineral Resource last February paved the way for a large equity financing in August and the completion of a PEA on the first phase restart of open pit heap leach operations in November.

Mineralization at Beartrack-

Arnett remains open along strike and at depth. Revival Gold has begun to release results demonstrating the potential to build on the recent first phase PEA heap leach mine plan and advance the prospect for an exciting new second phase mill opportunity," said, President and CEO, Hugh Agro. "The outlook for gold is favorable going into 2021 while new quality growth projects in gold in good locations are becoming increasingly rare."

Highlights: Increased Beartrack-Arnett's Inferred Mineral Resource estimate by 114% to 47.2 million tonnes grading 1.08 g/t gold containing 1.64 million ounces of gold and the project's Indicated Mineral Resource estimate by 11% to 36.4 million tonnes grading 1.16 g/t gold containing 1.35 million ounces of gold; Raised C\$15 million in an upsized bought-deal equity financing with funds earmarked towards advancing Beartrack-Arnett exploration and technical studies in 2020 and 2021; Announced the appointment of Maura Lendon as a non-executive member of the Board; Delivered a solid First Phase Preliminary Economic Assessment (PEA) outlining initial production of 72,000 ounces gold per year from the restart of open pit heap leach operations at Beartrack-Arnett with initial capital of \$100 million and an

AISC of \$1,057 per ounce; Completed 8,450 meters of drilling in 40 core holes in four target areas to upgrade and expand the resource at the Haidee target and test new targets located along approximately eight kilometers of favourable geological structure at Beartrack-Arnett; Released results from 23 drill holes at the Haidee target, all of which intersected oxide gold mineralization close to surface including 0.93 g/t gold over 28.3 meters and 0.86 g/t gold over 48.5 meters; and, Initiated work on a fully integrated three-dimensional computer model of the geology at Beartrack-Arnett to facilitate the application of industry leading artificial intelligence technologies, deepen Revival Gold's understanding of the deposit setting and target high grade mineralization on the project.

### Bam Bam Resources Expands Size Of Majuba Hill Project

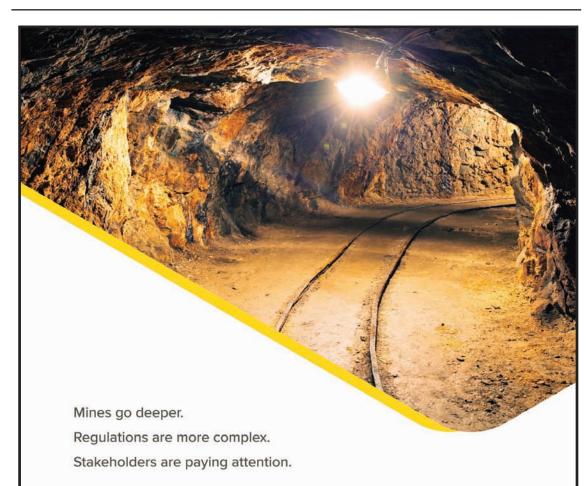
VANCOUVER - Bam Bam Resources Corp. reported that the size of the Majuba Hill Project has been increased by almost seventy five percent. The Company has added 168 new, unpatented lode mining claims and over 600 acres of private mineral and surface rights. This new land further centralizes control of the emerging porphyry copper district under the Bam Bam umbrella.

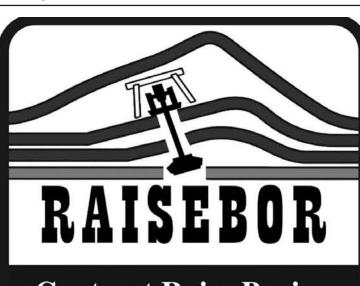
David Greenway, President & CEO, said, "I am pleased that we have been able to expand the Majuba Hill Project to over 13 square miles (approx. 34 square kilometers). This substantial increase to our land package continues our strategy of turning Majuba Hill into a much larger and established, district size porphyry project. The goal is to con-

tinue to step out and find the true depth and size of the deposit."

Majuba Hill is a large contiguous land position controlling the emerging Majuba Hill Copper District, located northeast of Reno, Nevada. "Majuba Hill District" is comprised of extensive mineral and surface rights held by private ownership, patented mining claims, and Federal Lode Mining claims that are 100% controlled by Bam Bam Resources Corp.

The property is easily accessed via 23 miles of well-maintained dirt roads leading from U.S. Interstate 80. Reno and Elko are major supply centers for exploration and mining activities. Existing highways are sufficient for transportation of explorationsize heavy equipment.





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



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

# We thrive on challenges

golder.com





### IDAHO New Carlin-Type Oxidized Gold Discovery At Robber Gulch

VANCOUVER - Gold Lion Resources Inc. reported a new Carlin-type oxidized gold discovery on its Robber Gulch Property located near Burley, Idaho. Trench RG-TR-20-03 intersected a broad interval of disseminated oxidized gold mineralization situated along a height of land within the project's Raider Zone gold-in-soil anomaly.

The discovery trench, which remains open in multiple directions, intersected 0.45g/t Au over 174m, including a subinterval of 0.51g/t Au over 138, and further sub-intervals of 0.88g/t Au over 45m, and 1.16g/t Au over 18m. The samples were collected as representative, even and continuous 2 to 3-metre-long chip samples, along the entire length of the trench, to exclude any potential sampling bias.

The new discovery is characterized by silicified and quartz stockwork veined calcareous sandstones and siltstones of the Pennsylvanian Oquirrh Formation with strong iron oxide mineralization underlying a very thin (<1m) cover of soil overburden along a saddle-like topographic ridge. The mineralized zone has been intersected within two cross-trenches (RG-TR-20-02 and RG-TR-20-03) and remains open to the north and south, where it trends underneath thin post-mineral flood basalt cover.

Several additional trenches have been planned along strike to the south, as trenching on the Property has proven to be a highly cost-effective means of sampling and attaining excellent structural and stratigraphic information for further targeting.

Highlights: New Carlin-type oxidized gold discovery situated at a height of land on roadaccessible BLM land, located close to excellent infrastructure within the mining-friendly State of Idaho; Similar geology to Liberty Gold Corp.'s nearby Black Pine oxide gold project (Pennsylvanian Oquirrh Formation); Trench RG-TR-20-03 intersected 0.45g/t Au over 174m, including 45 metres of 0.88 g/t Au in calcareous sandstones and siltstones of the Oquirrh Formation; Representative cyanide-soluble assays from the highlight interval returned a weighted average of 90% of fire assay, attesting to the thoroughly oxidized nature of gold mineralization on the Property; Gold values from previous mapping and select surface grab samples suggest an increase in grade to the south of RG-TR-20-03, onto US Forest Service (USFS) ground; Categorical Exclusion application for the first ever trenching and drill collaring on the USFS portion of the Property has been

submitted, to test better mineralized surface showings on trend to the south; and Maiden RC drill program in progress on BLM land. Entire first hole (RG-RC-20-01) has been submitted for geochemical analysis, with assays pending.

Chris Paul, Exploration Manager, said, "The new Raider Zone trench discovery represents a major milestone in the exploration and development at Robber Gulch. The results from trenches RG-TR-20-02 and RG-TR-20-03 have far exceeded any previously reported historic grades and widths on the Property. Broad intervals of intense alteration, quartz stockwork and limonite mineralization indicate the presence of a significant Carlin-type system on the Property.

Despite being located at a height of land, with a strong

gold-in-soil anomaly and minimal overburden cover, the Raider Zone had eluded discovery by historic operators, which were focused on jasperoid altered outcrops elsewhere on the Property. The Raider Zone anomaly remains open both to the north and south, where it trends beneath relatively thin post-mineral flood basalts.

The tenor of the Raider Zone gold-in-soil anomaly also increases to the south, into never-before trenched or drilltested ground, managed by the US Forest Service.

Outcrop grab samples of up to 6.49g/t gold have been collected by the Company along this southern extension. We are very excited to continue testing the Raider Zone along strike, both on BLM and Forest Service ground once permits are received from the USFS."

NAYLOR PIPE ...Serving The Mining Industry For 95 Years

Need pipe for water, high and low-pressure air, ventilation, tailings or slurry lines, sand and gravel or other product lines? Naylor has the right pipe for your application.

Available in carbon steel and alloys from 4" to 96" and wall thicknesses from 14 gauge to 1/2". Naylor offers the necessary fittings, couplings, fabrications, coatings and linings to provide you with your complete pipe system. **SUADD'** IS HERE!

THE FIBER GLASS SCALING BAR

REPLACEABLE
POINTS

**Hardened Steel** 

• LIGHTWEIGHT

Your Safety on the Job Deserves SLABBER'S Advantages!

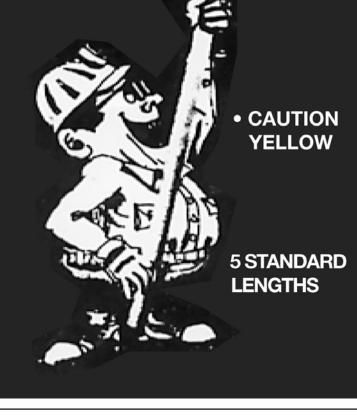
> Over Four Decades Of Service!

With maximum strength-minimum weight. Rock Tools SLABBER provides extra muscle for tackling your toughest scaling jobs:

- Scaling of hazardous banks in pit or quarry
- Barring down back, face or ribs in mine or tunnel
- Kiln brick removal
- Furnace build-up removal
- Right-of-way maintenance along railways
- Trenching in underground utility construction

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





Contact us for full details on SLABBER.®

# (801) 328-3733

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

# 

# **HIE TRANSPORT PROVIDES SERVICES FOR:**

Heavy Equipment (Construction, Mining and Aggregate) • Commerce
Exhibition Materials (Displays, Equipment, Literature and More)
Collector Items • Fragile Electronics, Art, Engineered Products
Medical Supplies • Vehicles • Motorcycles, UTVs, ATVs
Furniture • Equipment • Fifth Wheels • Travel Trailers • Boats

Tracking & Top quality insurance available on every shipment.

\*Prepay discounts of 10% and/or \*Cash discounts of 15%

Whatever the product - we bring the highest quality results with care to our customers.

HIE Transport reserves the right to refuse services based on transport restrictions, service conflicts and/or hazards.

### Contact HIE Transport through HIE, LLC

Email: hiedenveroffice@gmail.com Subject: HIE Transport Message: HIE Transport Direct Communications





# **Drilling Expands Mineral Footprint At Pamlico Gold Project**

VANCOUVER - Newrange Gold Corp. reported on the ongoing reverse circulation (RC) drilling program at its Pamlico gold project in Nevada. The holes reported herein (P20-92 to 110) were drilled in the Gold Box Canyon, Merritt, and Good Hope areas and demonstrate the extent of shallow oxide gold mineralization across the Pamlico District, covering an area of approximately 0.75 square kilometers. Drilling to the end of hole P20-110 has entailed 6,538 meters and is continuing.

Drill holes P20-92 to 98, inclusive, targeted projections of gold-bearing structural zones situated stratigraphically below the most favorable rhyolite - latite tuff contact zones, in the lower reaches of Gold Box Canyon.

To test the same or similar horizon as hosts mineralization in the Merritt zone and Pamlico Ridge will require drilling from on top of the ridges to either side of the canyon. Holes P20-92, 93, 94 and 95 were drilled to the southeast and hole P20-96 was drilled to the northwest, all at a -45 degree inclination and specifically targeted mineralization in northeast striking gold-bearing structures exposed in underground workings and at surface, where sampling returned values ranging from 0.6 to more than 20 grams gold per metric tonne (g/t Au).

Hole P20-94 was lost in a large breccia zone at 62.5 meters and could not be completed. Hole P20-97 was drilled to the southwest at an inclination of -45 degrees to test a large northwest striking, southwest dipping high angle fault zone that had returned gold values from 11.8 to more than 16.1 grams in grab samples from exposures in prospect pits and underground workings. Unfortunately, the hole was lost in a large breccia zone before reaching its target.

Drilling results indicate that a relatively flat-lying zone of gold mineralization exists near surface, as evidenced by intercepts in holes P20-93, 96 and 98, all of which correlate with previously drilled hole P20-65. While these intercepts average approximately 0.1 g/t Au, they are above 50 meters depth and require follow-up drilling.

It is interpreted that this zone correlates with the gold mineralization in the underground workings and that holes P20-92, 94 and 95 may have drilled underneath this horizon. The zone appears to dip shallowly to the east and a series of vertical holes will be required to further test the continuity of the mineralization.

Drilling in the Merritt zone comprised a combination of fillin and step-out holes and continues to expand and confirm gold mineralization peripheral to the Company's 2017 drill holes.

Holes P20-99 and P20-107 to 110, inclusive, all en-countered significant intercepts of near surface oxide gold mineralization highlighted by hole P20-110, which contained 3.05 meters averaging 4.250 g/t Au within a larger interval averaging 1.250 g/t Au over 10.67 meters from a vertical depth of 16.77 meters, followed by a second interval of gold mineralization averaging 0.742 g/t Au over the 21.35 meters from 53.35 meters vertical depth.

Holes 99, 107 and 108 expanded mineralization to the southwest 30 to 40 meters while holes 109 and 110 expanded mineralization 15 to 30 meters in a north-northeast direction.

Holes P20-100 to 106, inclusive, and 106A tested gold mineralization in the area of the Good Hope Mine, in the southern portion of Pamlico Ridge.

Underground sampling by Newrange in this area in 2019 and 2020 demonstrated good lateral continuity of gold mineralization.

Drilling has now confirmed that gold mineralization here is very shallow and locally outcrops as demonstrated by hole P20-104 that intersected 15.24 meters of oxide gold mineralization from surface grading 0.749



g/t Au, including a higher-grade interval from surface grading 3.145 g/t Au over 3.05 meters.

All holes were drilled vertically such that the gold zone appears to be approximately 4.6 to 15.2 meters in thickness with a shallow dip to the south-southeast, and it is still open to the northwest, northeast and southeast.

These drill results, together with all of the Company's previous drilling and underground sampling, continue to indicate that oxide gold mineralization at Pamlico occurs in a large, near surface, shallow-dipping to nearly flat, laterally extensive structural zone. This zone is focused near a major contact between latite tuffs and overlying rhyolite tuffs and flows, with mineralization locally extending upward into the rhyolite along structural zones.

The Company postulates that mineralization may have migrated laterally throughout the more permeable portions of this shattered contact zone from the apparently sulfide-rich 'Line 5' chargeability anomaly identified in the Company's 2020 Induced Polarization (IP) survey. Of note, drilled mineralization in the Good Hope Mine is more than 1.5 kilometers distant from the approximate center of the Line 5 anomaly.

The company's address is 580 Hornby St., #510, Vancouver, BC V6C 3B6, (604) 669-0868, Fax: (604) 558-4200, info@newrangegold.com.

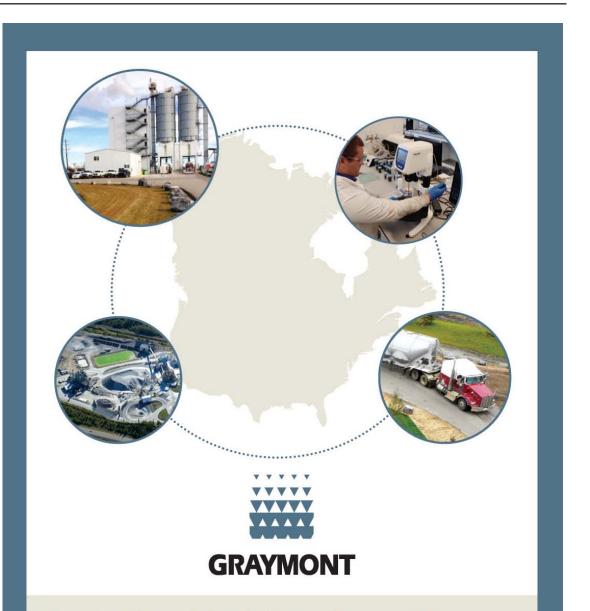




Harrison Western Construction Experience | Integrity | Performance

Responsible Natural Resources Development<sup>™</sup>

T 800.638.8793 | www.harrisonwestern.com



MINING & ENVIRONMENTAL SERVICES, LLC General Manager: Mark Levin, P.E.

### UNDERGROUND CONTRACTING

- Rehabilitation and Mine Development
- Contract Mining
- Remote Site Start-ups
- Bulkheading and Grouting for water control
- Serving Western U.S.

### **CONSULTING SERVICES**

- Design / Build Services
- Cost & Alternatives Analysis
- Operational Evaluations
- Safety Reviews
- U.S. and International

(303) 567-4174 www.minenv.com

UNDERGROUND MINING EQUIPMENT RENTALS & SALES

### Serving the mining industry for over 50 years...

Improving our world by responsibly meeting society's needs for quality lime and limestone products.

1.801.716.2634

Graymont.com



### **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





# **Core/Reverse Circulation Drill Holes Completed At Green Springs**

VANCOUVER - Contact Gold Corp. reported results for 5 additional drill holes from the 2020 drill program at the Green Springs gold property in the Carlin Trend. Contact Gold completed 5,785 metres in 10 core holes and 31 reverse circulation drill holes during the fall of 2020. Results are pending for 31 holes from the Alpha, Bravo, Charlie, Delta, Golf and Echo Zones.

Key Points: Drilling infills gold mineralization in the northern part of Echo Zone and confirms that mineralization is well oxidized with the first cyanide

### Second Round Of Drill Results At The Langis Mine

VANCOUVER - Brixton Metals Corporation reported the second round of drill results from its fall/winter exploration program at the Langis Mine Project located in the Cobalt Camp of Ontario. The assays for this round are from 14 holes totaling 1673.85m of NQ size core. Drill holes follow a fantype array with depths ranging from 55m to 176m across the Shaft 3 trend.

Highlights: Hole LM-20-111 intercepted 4m of 370 g/t Ag from 18m, including 1m of 1080 g/t Ag and 1m of 7% Cu, 27.6 g/t Ag, 0.03% Co from 113m; LM-20-113 intercepted 4m of 366 g/t Ag including 1m of 1015 g/t Ag, 0.35% Co; and Hole LM-20-110 intercepted 4m of 196.6g/t Ag from 3.6m, including 1m of 661 g/t Ag. assays from this high-grade pod located north of the area previously drilled by Contact Gold in 2019; and Gold mineralization intersected below the past-producing Charlie pit in the Pilot Shale horizon confirms Contact Gold's primary target concept that the unexplored Pilot Shale hosts gold mineralization beneath the Mine Trend at Green Springs.

Drill Highlights: Echo Zone -2.24 g/t oxide Au over 35.05 m from a depth of 35 metres in hole GS20-14, 92% cyanide recovery, Including 3.14 g/t Au over 22.86 m from a depth of 42.67 metres, and This intercept further extends the footprint of gold mineralization in the northern Echo Zone; 1.49 g/t Au over 17.68 m from a depth of 38.1 m, in hole GSC20-01, 67% cyanide recovery, GSC20-01 represents the first core hole ever drilled at Green Springs providing invaluable subsurface structural and lithological data; and More detailed modeling of high-grade pods in the Echo Zone have revealed an east-west fault control to gold mineralization that has previously been unrecognized and will be targeted during the next phase of drilling in 2021.

Charlie Zone: 0.28 g/t Au over 3.05 metres from a depth of 28.96 metres in hole GS20-08, 78% cyanide recovery; and 0.15 g/t Au over 3.05 metres from a depth of 163.07 metres, in hole GS20-07, 100% cyanide recovery - Pilot Shale hosted.

Both Charlie drill holes were drilled from the bottom of the

past producing open pit to target the Pilot Shale host horizon at the intersection of major northwest and east-west striking faults, delivering a significant gold intersection at the Pilot-Guilmette contact.

This intercept provides further evidence, in addition to drilled mineralization at the Alpha and Bravo Zones, that the underexplored lower Pilot Shale horizon hosts gold mineralization beneath the Mine Trend and likely elsewhere on Green Springs. Due to the difficulty in completing RC holes through the cavernous Joana limestone, and in order to obtain more detailed geological information for targeting, the Com-pany plans to drill more core holes going forward.

"The continued success of the team hitting well oxidized gold mineralization at Echo is extremely encouraging for the future of Green Springs," said, Matt Lennox-King, CEO. "Most significantly, successfully targeting and intersecting oxidized gold mineralization in the Pilot Shale beneath the Charlie Pit represents a further proof of concept at Green Springs, that the Pilot Shale can host gold mineralization along the Mine Trend. My team has recently located the old blast hole maps from mining and just completed digitizing the gold assays from them in 3D, allowing them to more precisely project and target controls to gold mineralization at depth in the Pilot Shale."



"Building & Operating America's Underground Mines"





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



# EXPLORING? MINING? **DO IT RIGHT. USE THE DRILLER'S CHOICE.**

Complete drill string solutions for every application. Whether you're at remote exploration fields, or drilling production holes with either DTH, rotary, or tophammer tools.

Mincon's world-class tools are made at state-of-theart facilities around the world, to deliver classleading performance and efficiency. And with dedicated service centers in Nevada and Utah, you can rely on expert advice from teams who understand your business and requirements.

### www.mincon.com



Mincon Inc. Utah Service Center 5447W 700S Unit D Salt Lake City, UT 84104 +1 801 918 8427

Mincon Inc. Elko Service Center 951 W. Main St. Suite A Elko, NV 89801 +1 775 440 6892

### **Freeport-McMoRan Mourns The** Passing Of Its Former Chairman, James Robert "Jim Bob" Moffett

PHOENIX, AZ - Freeport-McMoRan Inc. announced with great sadness that James Robert "Jim Bob" Moffett of Austin, Texas passed away at the age of 82. Mr. Moffett served as Chairman of Freeport-McMoRan from 1984-2015 and CEO from 1984-2003. Mr. Moffett co-founded McMoRan Exploration Co. in 1969 with B. M. "Mack" Rankin, Jr. (deceased) and W. K. McWilliams (deceased). In 1981, under Mr. Moffett's leadership, McMoRan merged with Freeport Minerals Company to form one of the world's leading natural resource companies, Freeport-McMoRan Inc. (FTX), FCX's former parent company.

"Jim Bob was a legend and visionary in the natural resource industry," said Gerald Ford, Chairman of the Board of FCX, University. He also received an and Richard Adkerson, Vice Honorary Doctor of Science Chairman and Chief Executive degree from Louisiana State Officer. "Jim Bob's passion and University and a Doctor of relentless drive as an explo- Financial Economics, Honoris rationist led to the discovery and Causa, degree from the Univerdevelopment of world class oil sity of New Orleans. and gas and mineral deposits over his long career.

with his family, friends and including the 1990 Horatio loved ones during this time."

in the natural resources industry 2000, he received that Associafor his leadership and vision. He tion's Norman Vincent Peale loved the University of Texas at Award for his exceptional Austin, where he played football humanitarian contributions to on an athletic scholarship, and society. He is also a member of received a Bachelor of Science the University of Texas Mcdegree with special honors in Combs School of Business Hall Geology in 1961. In 1963, he of Fame and the American received a Master of Science Mining Hall of Fame, Mining degree in Geology from Tulane Foundation of the Southwest.



Mr. Moffett was a noted civic leader and received many Our thoughts and prayers are awards during his career, Alger Association of Disting-Mr. Moffett was well known uished Americans Award. In



# COMPRESSOR-PUMP & SERVICE, INC.

### Your Total Solution Equipment Providor



# **Orea Signs Binding LOI To Acquire Extensive Gold Assets**

VANCOUVER - Orea Mining Corp. reported the signing of a Binding Letter of Intent ("BLOI") to acquire gold projects with an existing ore processing facility, including significant plant and equipment, in Colombia, South America. The BLOI was signed with the sellers on December 21st to acquire a 100% interest in 13 mining concessions in 3 separate blocks (the "Project") located in the Department of Bolivar, northern Colombia, South America; The execution of the corresponding Definitive Agreement is subject to the successful completion of due diligence by Orea within 90 days from the signing of the BLOI; The Project covers a total surface area of 250 square kilometers encompassing numerous artisanal gold mines; Orea considers the Project to be highly prospective for large epithermal

and porphyry gold-copper deposits; and The construction of a fully-permitted ore processing plant on the land holdings is near completion and will be fundamental to formalizing mining in the region.

As a business unit separate from exploration activities, an ore processing plant is under construction on the Project to treat artisanal ore feed from mines within the Project and surrounding mining concessions. The plant is estimated to be 75% complete and US\$3M capital expenditures are required for commissioning of the plant at a rate of 150 tonnes per day (tpd). Crushing and grinding capabilities can be increased to process 200 to 300 tpd. The plant flowsheet uses standard crushing and grinding, gravity separation of the free gold and non-toxic chemical reagents flotation to produce a concentrate. No cyanide leach circuit is required to obtain >90% recovery of the gold.

The flotation concentrate may be shipped to a refinery via Barranquilla, Santa Marta or Cartagena on the Caribbean coast. Free gold is poured into doré gold bars and exported via Medellin for refining.

A corporate and social responsibility strategy for responsible and sustainable development of the region has been implemented by the seller. Social licensing was achieved by toll mining. Social efforts have also been advanced in the different areas of influence with the support of local authorities such as vaccination days, educational talks, improvement of school infrastructure, tropical storm season relief, among others.

### **Further Progress At Pumpkin Hollow**

YERINGTON, NV - Nevada Copper reported a steady increase in performance from the Pumpkin Hollow underground project.

Performance Highlights: Mine Hoisting - In December, the Company hoisted 36,000 tons of ore, an increase of over 60% from November. During the first week of January 2021, electrical and instrumentation commissioning of the main hoist system was completed, allowing the main hoist to operate at the full production speed of 1,800 ft per minute, with hoisting rates in January targeted to increase by 200% - 300%; Recovery rates - In December, the average concentrate recovery was 86% including a number of days that reached above the Company's target of 90%; Lateral development - Monthly lateral development for December increased to approximately 1,200 ft, which is an increase of over 37% from November. A significant increase is expected this month with the

main shaft online; Geotechnical Stability - Geotechnical boundaries and properties of the East North orebody have been verified by the recent underground drilling and development drifting. As expected, the resulting geotechnical modeling has confirmed the stability of the East North ore body; and Production - The Company expects to reach steadystate production of approximately 5,000tpd by mid-2021.

CEO, Mike Ciricillo said, "The team continues to improve the performance both at the mine and processing plant, evidenced by the operational metrics for December. Most importantly, they have done it safely. In addition, the commissioning of the main hoist system is progressing well, with the shaft reaching its full production speed further enabling the ramp-up to our goal of 5,000 tpd of hoisted material. We are well on our way to show the projects potential."





The premier collaborative platform to revolutionize data connectivity and data management, improve processes, manage risk, and facilitate the adoption of future technology such as artificial intelligence and machine learning.

To schedule your complimentary demo, please visit us at EclipseMining.com

### Eclipse

Mining Technologies



# 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



### EMBRACING THE GLOBAL INDUSTRY STANDARD ON TAILINGS MANAGEMENT (GISTM)

By Peter Chapman Principal Tailings Engineer Golder Associates

Tailings dams have failed too often and for too long, with shocking consequences for human life and the environment. The devastating collapse of the Brumadinho tailings dam in Brazil in 2019 is a recent example in a very long history of major tailings storage failures worldwide. However, out of the tragedy has come an important development for the international mining industry: the Global Industry Standard on Tailings Management (GISTM), published in August 2020 by the International Council on Mining and Metals (ICMM), the United Nations Environment Programme (UNEP), and the Principles for Responsible Investment (PRI).

As an international champion for safer and more sustainable mining, Golder regards the launch of the GISTM as a milestone in the industry, with most major mine owners adopting the standard as a key component of their governance. The standard arises from the societal expectation that the mining industry needs to do more to achieve the goal of zero catastrophic failures. Through the use of six topics, the GISTM sets out a framework for prioritising safety throughout the life of a tailings facility, including design, operation, closure, and post-closure.

Building on the GISTM, discussions with industry leadership, and experience as an Engineer of Record, we view four areas as key to future success in tailings management.

### 1 - Design must be robust, flexible, and resilient and must identify all credible failure modes

Good design saves lives. When the design is robust, resilient and redundant, we plan for and seek to engineer away, to the extent practicable, the potential for failure. Topic III of the GISTM sets out a detailed framework for design, construction, operation, and monitoring of a tailings storage facility and identifies the need to consider all credible failure modes, as this is where many of the problems with tailings dams arise.

To minimise, as far as is reasonably practical, the potential for a failure to occur, it is essential to have identified the range of potential failure modes and to have a design defence and strong control in place for each credible failure mode, with clear links between failure mode, design defence, and monitoring. The need for a robust design is often at odds with the desire to minimise costs. Generally, a robust design may be perceived to add non-essential cost, but cost-cutting is a sure path to disaster. The safety of communities and the environment must never be compromised, and the costs of a failure far outweigh the incremental cost of robust design. Technology will keep improving, so it is also important to consider all available options. We need to keep the door open to incorporating new technologies rather than locking in a particular concept that is unchangeable. For instance, as filter technology improves there will be opportunities to use filtering to dewater tailings at higher production rates, enabling a reduction in the volume of tailings stored in above-ground wet facilities.

However, changing the technology is not without challenges. There will be cost implications, other failure mechanisms to manage, and different requirements for closure. Removing water, particularly a surface pond, will certainly reduce the extent to which a flow failure could occur and how far a flow failure can travel. However, even though a filtered tailings system reduces the risk to human life, it will require special measures to manage dust, control oxidation of reactive sulphides and leaching of metals, and mitigate the effects of rainfall, and therefore can still have significant implications for the environment, the community, and reputation.

### 2 - Education is needed across the industry

With the GISTM's increased requirement for designated engineering positions, technical reviewers, accountable executives and skilled operators, there will be a significant need for education and training, upskilling and knowledge sharing throughout the industry. Global best practices will need to be disseminated not only to clients, but also to consultants, regulators, and stakeholders.

As an industry, we cannot continue to do only what we've done before. In some jurisdictions, new options aren't taken on board because they haven't yet been proven. It is time to draw on our global experience to adopt the best of what is available and proven in other parts of the world. We also need to cross-train and upskill our people to be able to implement these technologies and methods, and to strengthen the industry mindset towards managing credible failure modes. If managing credible failure modes could be as important a KPI as being ahead of schedule or under budget, we would build a safer industry. Mistakes happen when costs are the main focus or when rushing to meet a schedule.

The best way for us, as an industry, to learn is by deeply examining what has failed before — and why it failed. We

must revisit the failure modes that haven't been adequately considered in historical failures and learn these lessons from the past. With this insight, we can build a robust approach to understanding how tailings facilities fail and put the appropriate design defences and controls in place to mitigate risk.

### **3 - Governance in the operational stage is critical**

Governance is a fundamental component of a safer tailings facility. Topic IV of the GISTM sets out the need for an accountable executive, a Responsible Tailings Facility Engineer, an Engineer of Record, and ongoing, regular risk management and safety reviews. It is also essential to have the right people involved both in design and in operations, including not only the technical (design) people, but also the operators, environmental and water specialists, mine planners and other stakeholders. A holistic view allows us to take advantage of opportunities as they arise (e.g., using mine waste to construct embankments, or using part of the tailings stream for underground backfill) and enables deviations

from the design to be identified well ahead of time (e.g., a change in process), enabling implementation of corrective measures.

Implementing a detailed, stringent, regular process of risk assessment is the essential counterpoint to the design flexibility discussed earlier. Once the facility is in operation, change is inevitable. The plant will change and there is likely to be at least some variance in processing rates, throughputs, methods, grinds, water demands and, more broadly, regional hydrogeology, and climatic patterns. Therefore, it is critical that the assumptions made during the design are continuously reviewed and assessed in the light of actual conditions.

### 4 - Design with closure in mind

Tailings storage facilities stay in place for a very, very long time – many will be there forever. Both in the design stage and during operations we should always be thinking about what will be left behind for the local community when the operational life of the mine comes to its inevitable end.

Continued On Page 17



# ADAPTIVE TECHNICAL

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

### Cementation WE BUILD MINES. SAFELY.

meritconsultants.net

cementation.com

tntinc.com

Mine Development & Construction • Shaft Sinking • Raise Boring • Feasibility & Design Engineering Contract Mining • Process Facilities Construction • Project & Construction Management • Material Handling When business brings you to town, make time to explore Elko, Nevada's wide open spaces!





### Nevada Gold Mines Launches New Employee Giving Program

ELKO, NV – Nevada Gold Mines (NGM) recently launched the company's new employee giving campaign, the Heritage Fund. The charitable workplace giving program includes an employee-driven campaign to support nonprofit organizations today and an Endowment Fund to support community needs into the future.

Through the Heritage Fund, NGM employees have the option to support non-profit organizations of their choice to reflect personal values, passions and pursuits. NGM provided all 7,000 employees with \$25 to start their giving account and will match 120 percent of each employee contribution to qualified organizations or to the Endowment Fund.

NGM also invested an initial \$500,000 to kick off the Endowment Fund portion of the program, which will be professionally managed and invested. The Endowment Fund was established as the financial legacy NGM will leave for long-term sustainability in the communities where the company operates.

"We understand and appreciate how important the services are that non-profit organizations provide for our communities," said Greg Walker, Executive Managing Director. "NGM strives to be a valued member of our local communities, and it is my hope that the Heritage Fund will be a source of strength in our local communities for many years to come."

The Heritage Fund is a 501c(3), managed by Executive Director Shane Moss and governed by a nine-person Board of Directors.

"Non-profit organizations play a vital role in our communities and will benefit greatly from our collective support. These causes often assist critical health and human services, important educational and environmental initiatives, community development, and even wildlife and habitat improvement. This is our opportunity to contribute to the organizations that are most meaningful to each of us at NGM and make a positive impact in the communities where we live," said Heritage Fund Executive Director, Shane Moss.

Nevada Gold Mines is a joint venture between Barrick and Newmont that combined significant assets across Nevada in 2019 to create the single largest gold-producing complex in the world.

# Alaska Industrial Development And Export Authority Receives Final Federal Authorizations For Ambler Road Project

VANCOUVER – Trilogy Metals Inc. reported that the Alaska Industrial Development and Export Authority (AIDEA) has signed agreements for Rightof-Ways for the Ambler Road Project with the United States Bureau of Land Management (BLM) and the National Park Service (NPS). The agreements grant a 50-year right-of-way on federally owned and managed land by the federal agencies for the future development of the Ambler Mining District Industrial Access Road.

On July 23, 2020, the BLM issued the Joint Record of Decision (JROD) for the Ambler Road Project. The JROD approves the development of the northern or "A" route which is to be a 211-mile-long gravel private access road in the southern Brooks Range foothills to provide industrial access to the Ambler Mining District. Along with the JROD, a Section 404 Permit, which is governed by the Clean Water Act (CWA), was issued by the United States Army Corp. of Engineers (USACE) to AIDEA.

On January 6, 2021, BLM, NPS and AIDEA signed Right-

of-Way agreements giving AIDEA the ability to cross federally owned and managed lands along the route for the Ambler Road Project approved in the JROD. The authorizing documents with the two agencies are the final federal permits required for the Ambler Road Project.

Ambler Metals LLC, the joint venture operating company equally owned by Trilogy and South32 Limited is also continuing discussions with AIDEA on securing a predevelopment funding agreement for the detailed engineering work for the Ambler Road Project.

During the 2020 field season, AIDEA was able to complete initial fieldwork on the proposed Ambler Access Project route which included a light detection and ranging survey ("LIDAR") and aerial photography and cultural resource work. AIDEA anticipates carrying out more fieldwork during the 2021 season, following all mandates required by the Covid 19 pandemic.

The Company also notes that a coalition of national and Alaska environmental non-government organizations (ENGO) have filed a lawsuit against the federal agen-



cies responsible for issuing the JROD. The ENGO's main position is that due process was not carried out during the permitting of the AMDIAP. Subsequently, AIDEA, and Ambler Metals have filed for and received intervenor status in the lawsuit and will be defending the issuance of the JROD and the permits.

Tony Giardini, President and CEO of Trilogy, said, "I would like to commend AIDEA for the continued positive progress of the Ambler Access Project which is a critical link in the development of the Ambler Mining District. Despite the difficult times caused by the COVID pandemic, AIDEA and the government of Alaska have demonstrated effective leadership and we expect continued progress on the road during 2021."

# 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.

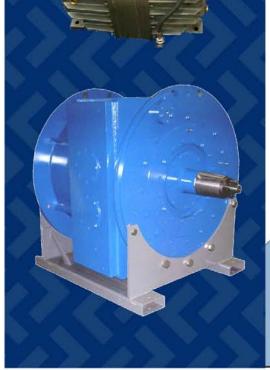
No more slipping, varying torque, or missed stop position.

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.





# THE MINING RECORD Professional Directory



# 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



# **Buckreef Gold Project To Advance With New Submitted Plan**

TORONTO - Tanzanian Gold Corporation (TanGold ) reported that it and its joint venture partner, The State Mining Company (STAMICO), have worked together to submit an updated mine plan for the Buckreef Gold Project to the Mining Commission in Tanzania. STAMICO, which is 100% owned by the United Republic of Tanzania (the Government), owns a 45% nondilutable equity interest in Buckreef Gold Company Lim-

ited, which wholly-owns the Project.

Changing circumstances necessitated an updated mine plan, including reviewing the mining license area to accommodate artisanal mining on certain concessions, and the separation of the oxide and sulphide mine processing plants for metallurgical considerations. As part of the submission to the Mining Commission, Buckreef intends to relinquish certain concessions since this has no impact on the Buckreef concession and Mineral Resources (2.04 million ozs). The updated mine plan, once approved, will replace the mine plan submitted to the Mining Commission in 2017 as part of the renewal of Buckreef's Special Mining License. An update of a mine plan is a normal procedure under the provisions of the Tanzanian mining laws.

The Company has also reviewed the Buckreef Joint Venture Agreement with STAMICO to bring its terms in line with recent changes in the Tanzanian mining laws and to modernize the working arrangement between the parties (the original JV Agreement was entered into in 2011). The parties have identified and agreed to amendments to the JV Agreement, which have now been submitted to the relevant Government authorities for further processes. The amendments are subject to the obtaining of necessary Government approvals and the finalization of relevant legal documentation. One provision in the new mining laws, which provides for the Government to receive a free carried interest in mining projects, does not directly address the situation where the Government already has a significant interest in the mining project, such as in the case of Buckreef where the Government, through STAMICO, has a 45% nondilutable equity interest in the Project. TanGold is in consultations with the Government regarding how best to address this nuanced issue given the Government's significant interest already held in Buckreef through STAMICO.

James Sinclair, Executive Chairman, said, "I have been involved in Tanzania for over 30 years. From the beginning, I have always felt that the development of a mining project requires a close working relationship and sharing of economic benefits with all stakeholders, including local communities, country citizens, partners and our shareholders. We have always adhered to and support local laws related to procurement, employment, the environment and non-corruption. This is why we agreed to a significant shareholding for our governmentowned partner when we entered into the Buckreef joint venture. We will always strive to support and assist Tanzania to meet its objectives, particularly with regard to the development of the local mining industry, local communities, and national development, including the important artisanal mining industry."

The Company continues to advance the Buckreef Feasibility Study. SGS Lakefield is in the process of completing its initial metallurgical test work. Terrane Geoscience is well advanced in completing a geotechnical study, which will be crucial in determining pit slopes. The Company has also advanced internal pit modelling. In addition, the Phase III exploration program is ongoing, and the Company will provide an update on the results of both the Phase III exploration program and various components of the Buckreef Feasibility Study when they are completed.

## **First Drill Targets Defined At The Beaufort Property**

VANCOUVER - E79 Resources Corp. has completed the first round of in-fill soil sampling over the high priority target areas on the Beaufort Project in Victoria. In-fill sampling was conducted on a 25m x 25m grid, designed to test both the northnorthwest and east-west anomalous trends defined by the previously reported soil geochemistry program. The in-fill survey is focused on the intersection of the two anomalous trends. This in-fill program will help guide E79's initial drilling campaign at Beaufort and determine optimal sample spacing to be employed on the extensions to the soil grid over the remainder of the 20km structural trend.

Rory Quinn, President and Chief Executive Officer stated, "We are confident that off the back of this in-fill survey the Company will be able to start sighting our initial drill collars on this exciting multi-element trend. We are proving that these cost-effective geochemical surveys allow us to narrow in on very precise target areas and we look forward to generating further drill targets as we expand upon the soil grids at Beaufort."

Highlights: A detailed in-fill soil sampling program has been completed over a previously defined soil anomaly; The gold anomaly is associated with elevated Arsenic and Antimony anomalies, which are often indicative of major gold systems in Victoria; The 25m x 25m sample grid is expected to refine the anomaly and allow for nearterm drill testing; Cost effective and time efficient geochemical surveys are proving to be a valuable and effective method of defining targets; Soil sampling along the prospective Navarre fault-Beaufort anticlinorium fold hinge corridor will continue; Structural mapping will be conducted to further assist drill targeting within the central block: and Company to initiate a geophysical data review on the existing data sets. In December, an in-fill soil

sampling program started within the completed central soil grid to increase the resolution of the anomalies and to assist in defining maiden drill targets. The focus of the in-fill sampling are the well-defined gold-arsenicantimony anomalies identified on the 100m x 100m soil grid completed earlier in 2020. Those defined anomalies are coincident and aligned with a pyritic shale unit and its intersection with a northeast-trending fault. In-fill sampling will extend along both linear trends.

Approximately 550 samples from the top of bedrock at depths of up to 2m were collected for analysis of the clay fraction for a multi-element suite and gold by an Aqua Regia digestion followed by analysis by inductively coupled plasma mass spectrometry (ICP-MS). Sampling is completed and the samples are currently on the way to a laboratory in Western Australia. Final analytical results are expected mid-February. Data quality will be assessed through the use of a comprehensive QA/QC program involving the use of field duplicates and certified reference materials.

Soil sampling on a 100m x 100m grid, similar to that used on the central soil grid area, is scheduled for both the proposed southern and northern soil grid areas in the first quarter of 2021. These surveys cover areas of state-owned Crown Land along the main NW-trending structural trend which is spatially associated with the inferred source of a majority of the historical alluvial gold mining activity. Further infill sampling on these soil grids is anticipated once analytical results are received and will be used to generate further drill targets at Beaufort.



### (GISTM) - Continued From Page 13 Embracing the Global Industry Standard on Tailings Management

Will our projects leave a positive legacy, or will we simply walk away, leaving the community with a perpetual risk?

There are many opportunities to shift the paradigm of mine closure by applying innovative, sustainable solutions that will maximise community benefits. Tailings can be used to support a community industry (e.g., creating bricks) or deliver additional value (e.g., generating renewable energy by installing solar panels on the dam).

To mitigate the long-term ongoing risk to the community and the environment, credible failure modes must be carried through and reviewed regularly in perpetuity, so that there's always a deep understanding of how things could go wrong and how all the controls are working to prevent failure.

This is what it all comes down to: the goal of managing tailings for zero harm to people and the environment with zero tolerance for human fatalities. The GISTM is a very significant step in the right direction towards safer and more sustainable tailings management, and Golder stands ready to support its implementation across the world.

# ABOUT PDAC

We are proud to be the leading voice of Canada's mineral exploration and development community since 1932. With over 7,200 members around the world, PDAC's work centres on supporting a competitive, responsible mineral sector.

The annual PDAC Convention is the world's premier international event for the minerals and mining industry. It has attracted more than 25,000 people from 135 countries in recent years.

Prospectors & Developers Association of Canada 800-170 University Avenue Toronto, Ontario M5H 3B3 416 362 1969 info@pdac.ca convention@pdac.ca





# Metallurgical Testing Begins At Happy Cat Gold Property

VANCOUVER - Black Mammoth Metals Corporation has contracted Hazen Research, Inc. of Golden, Colorado to begin gravity separation testing of a 111kg sample of material that Hazen has received from the Company's 100% owned Happy Cat gold property in Nevada. The sample was collected and shipped in December 2020 by Adam Knight, Professional Min-

### New Aluminim End Manufacturing Facility In Bowling Green, Kentucky

WESTMINSTER, CO - Ball Corporation reported plans to build a new aluminum end manufacturing facility in Bowling Green, Kentucky. The facility is scheduled to begin production in early-2022 and expand over multiple years to create approximately 200 manufacturing jobs.

"Our new Bowling Green, Kentucky, facility will provide aluminum end supply to Ball's expanding North American network of beverage can manufacturing plants," said Colin Gillis, President, Beverage Packaging. "Bowling Green will join our industry-leading network of more than 20 North American plants, including two new beverage can manufacturing plants currently under construction in Glendale, Arizona, and Pittston, Pennsylvania, scheduled to start up in early- and mid-2021, respectively. These investments will align our end production with our beverage can capacity investments, and are supported by numerous long-term customer contracts to serve the

unprecedented demand for sustainable aluminum packaging while furthering Ball's Drive for 10 vision for long-term success."

The facility will supply infinitely recyclable, lightweight aluminum ends to regional and national customers for growing beverage categories and brands. Ball plans to expand the facility over multiple years through the installation of additional end modules.

Ball chose Bowling Green for its new facility to supply robust Midwestern aluminum beverage packaging growth because of the city's proximity to main distribution routes and existing supply chain partners, the regional labor base and the cooperation of state, regional and local officials. Infinitely recyclable and economically valuable, Ball's aluminum ends, cans, bottles and cups enable a truly circular economy in which materials can be and actually are used again and again. In fact, 75 percent of all aluminum ever produced is still in use today.

ing Engineer who is independent of the Company. The objective of the testing at Hazen is to identify what gravity separation process may be optimal for further tests, including a larger pilot test. The testing is intended to further the Company's understanding of the gold grades and recovery rates as there may be an opportunity to conduct a bulk sampling operation at Happy Cat property. The initial gravity separation test has begun with the analysis and reporting expected to be completed by late January or February.

The 111kg sample was taken from the near surface gold anomaly at Happy Cat property. The gold anomaly occurs within a 600-metre diameter circular area where past exploration included RC drilling, trenching, auger drilling and sampling. Past metallurgical work using an iCON gravity concentrator and a Deister concentrating table suggested that the near surface anomaly is amenable to gravity separation. This past testing recovered visible particulate gold along with fine gold suggesting a nugget effect.

Along with the Company's 100% owned Happy Cat Gold Property, subject to underlying royalties (transaction subject to TSX-V approval), Black Mammoth has a 100% interest, subject to underlying royalties, in the Blanco Creek gold property

in central Idaho which hosts three historic underground mines along 3550 meters (11,644 feet) of strike on the north-east trending regional Blanco Shear Zone. Exploration by two previous operators identified a geological target for the Blanco Creek property in the order of 1.7 to 2.48 million tons, grading 0.20 to 0.33 oz/ton Au (1.54 to 2.24 million tonnes, grading 6.85 to 11.31 g/tonne Au).

JANUARY 2021

### **Commercial Production At The Relief Canyon Mine**

TORONTO - Americas Gold and Silver Corporation reported that the Relief Canyon mine, located in Nevada, has declared commercial production: Highlights: First gold poured February 2020; Since the return of the Company's large radial stacker in December, the operation has consistently met the required stacking rates, which was the final item required to declare commercial production; and Full ramp-up from the operation targeted by mid-May 2021. "I am pleased to ann

"I am pleased to announce that Relief Canyon has achieved commercial production following a challenging 2020," said, Darren Blasutti. "The Relief Canyon team worked hard to overcome the common teething pains in commissioning a new operation, the impact of the COVID-19 pandemic, and the failure of our large radial stacker. I look forward to a successful 2021."

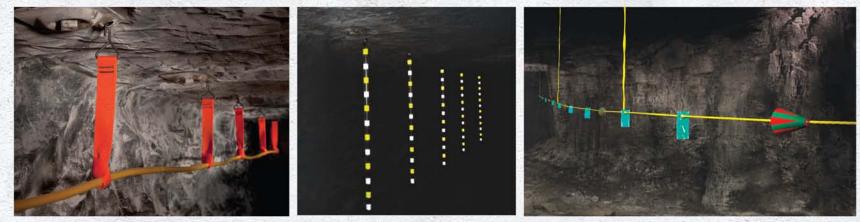
### **Potential At Past Producing Shasta**

WHITE ROCK, BC - TDG Gold Corp reported on its interpretation work of the historical drilling undertaken on JM and Creek-Shasta Zones of the former producing Shasta Mine in the Toodoggone Region, BC.. Interpretation of historical data demonstrates gold and silver bulk tonnage potential surrounding the former mined areas of the JM and Creek Zone veins together with their mineralized strike extensions to the south and south-east. Select drill logs and assays show gold and silver mineralization extends into host rock and vein stockworks in widths up to 100 metres. Only 63% of historical drill core was assayed - potential to increase mineralized widths in several areas remains with resampling of old and new.





Strong, durable, extremely corrosion resistant for long life. Manufactured from high tensile spring steel, coated in thick, high dielectric grade, flame retardant PVC Plastisol.



CAB® Leaky Feeder Hangers reduce interference and improve signal strength, while CAB® High Visibility Reflectors and CAB® Lifelife have become industry favorites.

# SAVE THE DATE

# LEARN | DISCOVER | CONNECT





2021 SME Annual Conference & EXPO

CMA 123rd NATIONAL WESTERN MINING CONFERENCE

MARCH 1-5, 2021 | VIRTUAL EVENT

Mining's most anticipated technical conference will bring fresh perspectives from around the world on a range of hot topics including COVID recovery, critical minerals, water issues and tailings management – connect directly from your home, office or job site.

> Make your plans to connect at MINEXCHANGE



### smeannualconference.com | #MINEXCHANGE21









# BUILDING ON STRENGTH

www.fcx.com