AME REMOTE ROUNDUP.

Roundup 2021 is hosted from the unceded territories of the Coast Salish people, including the lands belonging to the xwməθkwəy əm (Musqueam), Skwxwú7mesh (Squamish) and səl ílwəta? /Selilwitulh (Tsleil-Waututh) Nations.

Abstract Guide

aletown

Yaletown-Roundhouse Station

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REGIONAL OVERVIEWS

Mineral Exploration and Mining in British Columbia, 2020

Gordon Clarke, Director, Mineral Development Office, BC Ministry of Energy, Mines and Low Carbon Innovation

Regional Overviews 10:15 AM – 10:40 AM

Mineral and coal production for 2020 continued to be a major contributor to the provincial economy, but lower coal prices resulted in the shut down of the Willow Creek coal mine and a decrease in the value of production for coal mines that remained open. One metal mine (Silvertip: Ag, Pb, Zn) also shut down but may restart in late 2021. Although 2020 will be remembered for the COVID-19 pandemic, exploration in British Columbia rebounded following initial disruptions. Increases in the price of gold and copper, likely stimulated by the pandemic, spurred financing and exploration for precious metal and copper-gold projects. The largest single investment was the acquisition by Artemis Gold Inc. of the Blackwater Gold project from New Gold Inc. for approximately C\$210 million. The project has both provincial and federal environmental assessment approval; construction is planned for the second quarter of 2022. Advanced-stage exploration project highlights include maiden resource announcements for the Saddle North copper-gold project (GT Gold Corp.) and the Snip gold project (Skeena Resources Limited). Preliminary economic assessments were announced for several projects: KSM copper-gold (Seabridge Gold Inc.), Turnagain nickel (Giga Metals Corp.), Baptiste nickel (FPX Nickel Corp.) and Dome Mountain gold mine (Blue Lagoon Resources Inc.). Taseko Mines Ltd. released an updated feasibility study for their Yellowhead copper project and plan to restart environmental assessment. Jameson Resources Limited released a bankable feasibility study for their Crown Mountain coal project. Many companies reported excellent results from large drilling programs, and high-grade intersections from deep porphyry targets highlight untapped resource potential. The province may have avoided the global trend of declining expenditures due to the resourcefulness of explorers in British Columbia, the innate mineral endowment of the province, and the provincial declaration of exploration and mining as essential services. Continuing reports of new discoveries and significant results support British Columbia's reputation as a premier jurisdiction for the industry.

<mark>λΜΕ</mark> ROUNDUP.

Yukon Geology, Exploration and Mining Overview, 2020

Scott Casselman, Head of Minerals Geology, Yukon Geological Survey

Regional Overviews 10:40 AM – 11:05 AM

COVID-19 restrictions negatively affected the 2020 exploration season during the first half of the year; however, a surge in metal prices in mid-summer was a shot in the arm for Yukon explorers, and we had a strong finish to the exploration season. Mineral exploration expenditures for 2020 are expected to be between \$70 and \$80 million, down about \$35 million from 2019 levels. The number of active exploration projects has dropped to about two-thirds of 2019 numbers. Mine development expenditures were also down to \$65 million in 2020 compared to \$225 million in 2019. This drop in expenditures was expected, due to the completion of construction at Victoria Gold Corp's Eagle gold mine.

Victoria Gold announced commercial production at the Eagle gold mine on July 1. The mine is expected to produce more than 100 000 oz of gold this year as it ramps up to full production of 210 000 oz of gold per year in the years to come.

Pembridge Resources had its first full year of production at the Minto copper-gold mine. The company is working to increase production to 4000 tpd, which will maximize mill capacity.

Alexco Resource Corp received an amended water license to re-commence silver production at its Keno Hill operations. On November 24, it announced the start-up of the mill. Initial production will come from the Bellekeno deposit, then switch to the Flame & Moth discovery and eventually to the Bermingham deposit.

Gold continues to be the driver of exploration activity, with 58% of exploration spending on 42 projects directed to the precious metal. The White Gold district, Rackla gold belt and Dawson Range continue to be the dominant regions for gold exploration in the territory, but we are seeing a resurgence of activity in the Wheaton River area, south of Whitehorse.

A steady increase in base metal prices through the summer helped to finance base metal–focused companies. The Yukon Environmental and Socio-economic Assessment Board's release of the final screening report on the Kudz Ze Kayah VMS project was good news for BMC Minerals (No. 1) Ltd. The positive recommendation lists 30 mitigation measures and 6 monitoring measures for the project. The company is now preparing development permit applications.

Zinc explorers were active in the Selwyn Basin: Cantex Mine Development Corp. worked their Rackla North project in the north and Fireweed Zinc Ltd worked their Mac Pass project in the east. The Dawson Range continues to be the place to look for copper: Western Copper and Gold Corp had a substantial drill program on the large Casino porphyry deposit and Triumph Gold Corp was active on the Freegold Mountain project.

Funding for the Yukon Mineral Exploration Program was increased by \$1.1 million to \$2.5 million this year to help offset the negative financial effects of the COVID-19 pandemic. This investment by the Government of Yukon leveraged greater than \$9 million in exploration expenditures. The program funded 95 projects in 2020.

The Yukon Geological Survey (YGS) is focused on supporting the exploration and mining community. The YGS has been busy compiling exploration data as well as providing the regional geological framework to allow companies continued exploration success.

<mark>λΜΕ</mark> ROUNDUP.

Alaska's Mineral Industry Activity in 2020

Melanie Werdon, Chief Mineral Resources Section; Geological Scientist, Alaska Geological & Geophysical Surveys

Regional Overviews 11:05 AM – 11:30 AM

Alaska's diverse metallogenic provinces, under-explored mineral resource potential and world-class gold, copper, lead, zinc and coal deposits continue to attract exploration capital. Alaska's estimated total 2020 exploration spending, including near-mine, development-stage and exploration projects, is at least US\$110 million (about C\$143 million), down significantly from 2019 levels due to COVID-19–related project deferrals to 2021 and late starts to 2020 programs. At least 16 non-mine projects spent more than US\$1 million (about C\$1.31 million). In 2020, Alaska had 6 lode metal mines (Red Dog, Fort Knox, Pogo, Kensington, Greens Creek and Dawson), 1 coal mine (Usibelli) and about 200 placer mines, and there were 11 advanced-exploration– and development–stage projects (10 active; 2 with drill programs).

In 2020, companies in Alaska had numerous exploration successes and discoveries. The primary focus was on intrusion-related and mesothermal gold exploration and development projects statewide. Alaska's porphyry Cu-Mo-Au (±Re, ±Pd) belt, and volcanogenic and sediment-hosted Zn-Pb-Ag-Au-Ag massive sulfide districts were also the focus of exploration interest. Alaska had at least 27 active early-stage exploration projects throughout the state. Drilling programs to advance exploration and development projects were carried out at the Alaska Range (Zackly), Amanita, Donlin, Estelle, Golden Summit, Goodpaster/Central, Herbert Gold, Illinois Creek, Last Chance, Niblack, Johnson Tract, Sam, Seventymile, 64 North, Tibbs and Unga projects.

The Alaska government encourages resource development by providing geological datasets/maps, airborne geophysical surveys, Alaska Industrial Development and Export Authority partnerships with private entities to finance infrastructure, and permit coordination by the Office of Project Management and Permitting.

NEW GEOSCIENCE

Characteristics, Temporal Variations and Significance of Paleozoic Magmatism for the Tectonic Evolution of the Northern Cordillera

Alex Zagorevski, Geological Survey of Canada

New Geoscience 1:35 PM – 1:50 PM

Geochemical and temporal characterization of magmatic rocks is an effective way to test terrane definitions and evaluate tectonic models. In the northern Cordillera, magmatic episodes are mostly interpreted as products of continental arc and backarc settings. Re-evaluation of Paleozoic magmatic episodes presented herein highlights fundamental gaps in our understanding of the tectonic framework of the northern Cordillera. In many cases, the character of magmatism and temporal relationships between various magma types do not support existing tectonic models. Re-evaluation of available data indicates that some of the magmatic episodes are best explained by lithospheric extension rather than arc magmatism. In addition, comparison to modern analogues suggests that many presently defined terranes are not fundamental tectonic building blocks, but rather combine distinctly different tectonic elements that may not be related each other. Grouping of these distinctly different tectonic elements into single terranes hinders the understanding of Cordilleran evolution and mineral deposits.

Why is the Golden Triangle so Metal Rich? A New Model

Bram van Straaten, BC Geological Survey; JoAnne Nelson, BC Geological Survey; Lori Kennedy, The University of British Columbia; Gayle Febbo, Kingfisher Metals Inc.; Emily Miller, The University of British Columbia; and Rebecca Hunter, BC Geological Survey

New Geoscience 1:50 PM - 2:05 PM

The Golden Triangle is a world-class mineral district located in the Stikine Terrane of northwestern British Columbia. Most porphyry copper-gold and epithermal gold-silver systems in the district are coeval with the onset of latest Triassic to early Jurassic lower Hazelton Group volcanism, with magmatism hitherto ascribed to opposing subduction underneath the Stikine Terrane.

We propose a post-subduction model for latest Triassic to early Jurassic (ca. 207–190 Ma) magmatism, porphyry and epithermal emplacement in the Golden Triangle. Such a model is supported by

- syndepositional faulting, including rapid facies variations in thin volcano-sedimentary successions, local coarse siliciclastic deposition, and fault-proximal megaconglomerates;
- the orthogonal geometry of syndepositional fault systems (north–south typically strike-slip and east–west typically extensional) suggesting emplacement of deposits into transtensional pull-apart basins;



- common fault-parallel, tabular-shaped mineralized intrusions and sheeted porphyry- and epithermal-style veins, which imply strong structural control during emplacement;
- preceding contractional deformation (approximately 215–208 Ma folds, thrusts and angular unconformity)
 resulting from collision between the Stikine and neighbouring Yukon-Tanana terranes. A coincident lull in arc
 magmatism suggests termination of subduction during this time;
- coeval uplift and erosion (likely resulting from continued contractional deformation) along the adjacent Stikine
 arch to the north, which lacks lower Hazelton strata, magmatic roots and associated mineralization;
- the gold-rich nature of mineralization and association with the onset of volcanism, which are common features of post-subduction mineralization worldwide; and
- geometric problems with long-lived opposing subduction zones.

Localized transtension during the waning stages of Stikine–Yukon-Tanana orogenesis is likely responsible for the remarkable copper-gold endowment of the Golden Triangle. Transtension along pre-existing trans-lithospheric structures provided an efficient mechanism and pathway for magma generated by remelting of previously subduction-metasomatized sub-arc lithosphere. Exploration programs should evaluate 1) stratigraphic and structural indicators for localized transtension and 2) the potential for dilational jogs and step-overs associated with district-scale lineaments to host porphyry and related mineralization.

Some Recent Advances in Yukon Geology – A 2020 Perspective

Maurice Colpron, David Moynihan, Rosie Cobbett and Patrick Sack, Yukon Geological Survey

New Geoscience 2:05 PM - 2:20 PM

Regional mapping projects in the Selwyn Basin region have improved understanding of Neoproterozoic–Paleozoic stratigraphy and development of the western Laurentian margin. In the eastern Rackla belt, mapping has shown the stratigraphic continuity between the Windermere Supergroup of the Mackenzie Mountains and the Hyland Group in Selwyn Basin. This work also provides a stratigraphic framework for strata hosting Carlin-type gold mineralization in the eastern Rackla belt (e.g., Osiris, Conrad).

Mapping farther south in the Hyland River area identified a similar stratigraphic succession for the Hyland Group. In southeast Yukon, these rocks are affected by polyphase folding, dissected by strike-slip faults and metamorphosed and intruded by mid-Cretaceous plutons. The mapping provides a structural context for intrusionrelated and orogenic gold occurrences in the region (e.g., 3Ace, Golden Culvert, Justin).

Mapping of lower and middle Paleozoic rocks in the western part of Selwyn Basin shows that volcanic rocks are more extensive than previously known. The Lower Ordovician Menzie Creek formation basalt, which overlies strata hosting SEDEX deposits at Faro, is now dated at ca. 484 Ma. Farther south, felsic metavolcanic rocks associated with VMS mineralization at Matt Berry are slightly older at ca. 486 Ma, suggesting a close link between the two styles of base metal deposits. Volcanism in the upper Earn Group (ca. 364–363 Ma) of central Yukon was associated with syn-depositional extension and deposition of coarse clastic rocks that are inferred to record late Devonian rifting, leading to opening of the Slide Mountain ocean.

Finally, a study of late Triassic to Jurassic plutons in the Intermontane terranes provides the framework for the distinct style of Cu-Au-Ag mineralization encountered at the Minto and Carmacks copper deposits. Precise dating shows that they are late Triassic porphyry deposits that were metamorphosed/migmatized during the intrusion of early Jurassic syn-collisional plutons.

<mark>λΜΕ</mark> ROUNDUP.

Northern Hogem Batholith Deconstructed

Luke Ootes, BC Geological Survey; Gabrielle Jones, University of Alberta; Dejan Milidragovic and Nathan Hayward, Geological Survey of Canada; Richard Friedman, The University of British Columbia; Alfredo Camacho, University of Manitoba; and Richard Stern, Yan Luo, Adrian Vezinet and Graham Pearson, University of Alberta

New Geoscience 2:20 PM – 2:35 PM

The Hogem batholith, in the north-central Quesnel Terrane, is a Mesozoic plutonic complex that intruded volcanosedimentary rocks of the Nicola Group. The batholith hosts the Lorraine, Kwanika and Mount Milligan porphyry copper-gold deposits and a significant number of copper-gold exploration targets. Before this study, publicly available geoscience information for northern Hogem batholith was sparse relative to other porphyry-hosting intrusions in British Columbia. In 2018, Geoscience BC released the results of the Search III magnetic and radiometric survey and the British Columbia Geological Survey initiated 1:50 000-scale mapping across the northern Hogem batholith and adjacent rocks.

The mapping is now supported by modern analytical data that allow petrological and geophysical modelling, thus providing a backdrop for the distribution and evolution of intrusive suites in northern Hogem batholith. The bedrock mapping and geophysics delineate the northern Hogem batholith in three dimensions; field, geochronological and geochemical data indicate punctuated emplacement of four distinct intrusive suites during a protracted 80 m.y. interval, from ca. 207 to 128 Ma. These suites vary in composition, from the metaluminous Thane Creek suite (ca. 207 to 195 Ma) that hosts copper-gold prospects to the mildly alkaline Duckling Creek suite (ca. 182 to 175 Ma) that hosts the Lorraine deposit. The Osilinka suite (<160 Ma) is a weakly peraluminous leucocratic granite that may have been derived by the melting of a mix of Quesnel basement sources. The weakly peraluminous Mesilinka suite (ca. 135 to 128 Ma) represents mid-Cretaceous melting of recycled and imbricated crust. Both Jurassic and Cretaceous deformation fabrics are preserved in the Hogem batholith, further indicating a punctuated tectonic history. The supporting publicly available geoscience data brings the knowledge base of northern Hogem batholith into a modern era, supporting confidence in exploration decision making.

Petrological Controls on PGE Mineralization in Alaskan-Type Intrusions

Dejan Milidragovic, Geological Survey of Canada; Graham T. Nixon, BC Geological Survey; James S. Scoates, James A. Nott and Dylan W. Spence, The University of British Columbia

New Geoscience 2:35 PM – 2:50 PM

Alaskan-type intrusions are zoned, mafic-ultramafic, subvolcanic magma chambers emplaced in convergent margin settings. Their lithological zonation reflects the combined effects of magma differentiation and crystal accumulation, punctuated by episodes of recharge and remobilization of cumulates. The petrological significance and economic potential of Alaskan-type intrusions remains poorly understood despite their global distribution and widespread occurrence in the North American Cordillera.

Alaskan-type intrusions (e.g., Tulameen, southern British Columbia) are known for their potential to host chromiteassociated platinum-alloy mineralization and to source placer deposits. This is not the only style of platinum group element (PGE) mineralization that can occur within the ultramafic portion of Alaskan-type intrusions. Recent investigation of chromite-bearing dunite from the Polaris intrusion (north-central British Columbia) has revealed a pronounced enrichment in iridium subgroup PGE (Ir, Ru±Rh), and a relative depletion in platinum and palladium. There is also increasing evidence that olivine clinopyroxenite, hornblendite and plagioclase-rich portions of Alaskan-type intrusions may contain significant concentrations of Pt–Pd±Au in association with disseminated, magmatic sulfides (pyrrhotite, chalcopyrite, pentlandite±bornite), some of which include high copper±iron assemblages.

The style of PGE mineralization in Alaskan-type intrusions reflects the interplay of two key intrinsic properties of subduction-related magmas: 1) high, but variable, oxygen fugacity (fO₂) and 2) high H₂O content. The dearth of platinum alloys in ultramafic cumulates of the Polaris intrusion reflects the strong positive dependence of platinum solubility on fO₂ and implies involvement of highly oxidized parental magma(s) (log fO₂ \geq FMQ +2). In contrast, ultramafic cumulates crystallized from less oxidized magmas (log fO₂ \leq FMQ +1) are characterized by the stability of platinum-iron alloys. Sulfide saturation in Alaskan-type intrusions is tied to the saturation and fractional crystallization of magnetite, which promotes the segregation of an oxidized, copper-rich, immiscible sulfide melt. Experimental data indicate that co-saturation of sulfide, olivine, clinopyroxene and magnetite requires water-saturated (H₂O \geq 4 wt. %) magmas.



THEME SESSION – LEADING THROUGH CHANGE

Local Metals and Canada's Role in a Green Economy

Stephen J. Piercey, Memorial University of Newfoundland

Theme Session – Leading Through Change 9:05 AM – 9:25 AM

The realities of climate change have resulted in governments and societies globally planning and implementing a shift from carbon-based economies to those that are renewable — a green economy. This shift toward a green economy will result in fundamental changes in our transportation and energy delivery infrastructure toward electric, solar and nuclear energy and the use of increasingly less fossil fuels. This new and emerging economy will require metals that have been mined for millennia (e.g., copper, iron, nickel), as well as emerging 'strategic' or 'critical' metals (e.g., cobalt, rare-earth elements, lithium). Many of the traditional metals, but more specifically the critical metals, often have restricted supply and/or come from jurisdictions that have questionable political, human rights, environmental and occupational health and safety records. Consequently, the shift to a green economy will require us to make important decisions about where we source the metals so critical to the green economy: Do we import them or do we mine them in our own backyards? As a country, we have the fortuitous combination of outstanding geology, human capital and talent; outstanding educational systems; and a political and legal framework that puts the Canadian mining industry in a position to be leaders in sustainably supplying the metals needed for a green economy. As Canadians we must embrace the concept of 'local metals' like we have embraced the local food and local economy movements. Doing so will ensure that we can not only provide the metals needed for an emerging green economy, but can regulate the extraction of such resources while also reaping the economic benefits of doing so for the benefit of all Canadians.

λΜΕ ROUNDUP.

Evaluating the Electric Vehicle Demand for New Nickel Supply: Can Canada Fill the Void?

Michael J. Tucker, Kore Mining Ltd.; John Foulkes, formerly of Balmoral Resources Ltd.

Theme Session – Leading Through Change 9:25 AM – 9:45 AM

With the exploding global demand for electric vehicles, the increased number of electric vehicles using a nickelbased lithium-ion battery, and the ever-increasing nickel weightings in those batteries, nickel appears poised to play a starring role in the emerging electric vehicle revolution. Although the true scale of nickel that will be required to supply this new demand stream has yet to fully emerge, there is already a renewed interest in nickel exploration globally. This begs two important questions: where is this nickel going to come from, and which nickel deposits or deposit types will be viable sources to meet this emerging demand? Further, are there non-traditional sources that may arise to exclusively supply a niche battery demand? Canada has a long history as a global contributor to the nickel market. This presentation will explore where new nickel supply might emerge from within Canada, and what types of deposits it might be sourced from.

A Case for Change: The Value of the Right Information at the Right Time from Exploration to Production

Dave Lawie, Chief Geoscientist, IMDEX; John Steen, Director, BRIMM

Theme Session – Leading Through Change 9:45 AM – 10:05 AM

Anecdotally the mining industry knows that inadequate orebody knowledge (OBK) increases the risk of capital projects. Further, the lack of quantifiable evidence means that these risks are often ignored during project assessment, from exploration through to production. These risks make it harder for miners to attract capital, which represents a significant threat to the growth of the industry. Pilot study data show that write-downs in the value of mines are associated with geoscientific challenges in about 30% of cases. Geoscientific financial losses may be caused by overestimating orebody size, processing problems caused by geochemical properties, and unfavourable rock mechanics. These problems arise due to poor risk management resulting from insufficient OBK; the size of these losses/impairments provides a strong case for placing a high value on having the right information at the right time.

<mark>λΜΕ</mark> ROUNDUP.

Safely Implementing Large-Scale Exploration and Development Programs During a Global Pandemic – A Case Study

Paul Geddes and Norma Jean Adzich, Skeena Resources Limited

Theme Session – Leading Through Change 10:05 AM – 10:25 AM

The effective execution of large-scale exploration programs entails meticulous planning and coordination to ensure that corporate, technical and safety objectives are realized. The unprecedented events of the last year have challenged the industry to consider new operational practices that unequivocally safeguard the health and wellness of team members, their families and local communities. Tasked with completing a substantial exploration and development program in the midst of a global pandemic, the team at Skeena Resources conceived and put into practice a self-directed infection prevention and control plan that has to date resulted in greater than 15 000 COVID-19–free person days since operations resumed in May 2020. The company will discuss the measures undertaken to achieve their singular goal of 'zero transmission – zero harm'.



COMMODITIES AND FINANCIAL MARKETS

Investment Case for Gold and Gold Equities

Imaru Casanova, Deputy Portfolio Manager, VanEck

Commodities and Financial Markets 1:50 PM – 2:07 PM

The global pandemic fueled the largest deflationary shock to the economy since the 2008 financial crisis and may drag on growth for decades to come. We believe persistent risks to economic well-being, combined with a weaker US dollar and negative real rates, could push gold prices much higher, much sooner than anticipated.

Meanwhile, gold companies have become one of the most fundamentally attractive investment opportunities in the market today and yet still face the tall task of enticing generalist investors back to the space. We will discuss our outlook for gold and gold equities and the role of gold in a portfolio.

Reflation Trade Supports Cyclical Bull Market for Commodities: A Quantitative/Technical Review

Mark Deriet, Cormark Securities

Commodities and Financial Markets 2:07 PM – 2:24 PM

Commodities that enjoyed bubble-like returns during the 2000–2010 period have been fully deflated, along with investor expectations After more than 5 years of pain from roughly 2011–2016, commodities have begun a basebuilding period, during which a series of cyclical bull markets are expected to ensue. The global pandemic demand shock resulted in extreme moves in all asset classes, including safe havens such as gold bullion and sovereign bonds. The nascent global economic recovery and improving inflation expectations should fuel a 'reflation trade', during which commodities, including gold, will outperform other defensive asset classes such as bonds.

The global economic rebound should weigh on the counter-cyclical US dollar, which also provides a tailwind for commodities. Gold led the commodity complex off the bottom and now more cyclical commodities, including copper, oil and silver, should play some catch up to gold during such 'risk-on' periods. Historically, these periods of economic recovery/risk-on have tended to last for approximately 2 years or more, suggesting that there is more than another 18 months to go. Our proprietary quantitative/momentum models for sector rotation and stock selection are picking up this shift into more aggressive areas of the market, particularly materials excluding gold.

Although we do not anticipate another 10-year commodity supercycle in the near term, resources can enjoy significant cyclical bull markets benefitting from improving global growth.



Battery, Magnet and Photovoltaic Materials — Mineral Resources and Markets: Implications for Current and Future Opportunities for Exploration and Development

George J. Simandl, British Columbia Geological Survey; Suzanne Paradis, Geological Survey of Canada; John R. Goode, J.R. Goode and Associates

Commodities and Financial Markets 2:24 PM – 2:41 PM

As demand for green technology grows, junior mining companies are increasingly focused on exploring for and developing deposits containing battery (e.g., Li, Co, Mn, V, Ni and natural graphite), magnet (e.g., rare-earth elements, specifically Nd, Pr, Sm, Dy and Tb), and photovoltaic (e.g., Ge, In and Si) materials.

Materials that are essential to green energy programs, the health of the economy, and the security of the European Union and the United States, and are exposed to a high risk of supply disruption, are commonly referred to as 'critical.' Where the use of such materials is less than 200 000 tonnes/year, they are referred to as 'specialty' materials.

Exploration and development programs for most specialty materials must account for a small market base and fast market growth projections, which are subject to large margins of error. The small market base implies that the economies of scale may not be available to the developer. Furthermore, for economical extraction, speciality material projects may require the development of unique metallurgical processes, or significant modifications of existing ones, which may be difficult for junior exploration companies to finance. In the longer term, as the market of any given specialty metal grows the economy of scale may become an applicable, relevant and positive factor. Exploration and development programs must also take into consideration that many of these materials (e.g., Ge, In, Co) are largely byproducts of existing base-metal production. In the short to medium term, geopolitical constraints and supply chain bottlenecks may result in shortages of some of the materials listed above; however, no supply disruptions due to lack of mineral resources should be expected if the relationship between market and demand remains elastic, and if users accept a gradual increase in the price of materials when established, low-cost resources are exhausted.

λΜΕ ROUNDUP.

The Making of a Million-Ounce Gold Producer

Greg Smith, President, Equinox Gold Corp.

Commodities and Financial Markets 2:41 PM – 2:58 PM

What does it take to build a producing gold company of scale?

In 2016, the company now known as Equinox Gold embarked on a series of mergers, acquisitions and divestments that took a small \$30 million copper exploration company and transformed it into a \$3 billion gold producer with 7 operating mines, 3 growth projects, 22.4 million ounces in resources and a path to more than 1 million ounces of annual gold production. We discuss

- the strategy that launched Equinox Gold and how it evolved over time;
- some of the key deals Equinox Gold completed (and why it made them); and
- how the 'flywheel' effect contributed to the explosive growth that propelled Equinox Gold from a smallscale explorer to a globally recognized gold producer.



PRECIOUS METALS

Regnault Discovery: A New High-Grade Gold System in the Frotet-Evans Greenstone Belt

Francis MacDonald, Executive Vice President, Exploration and Co-Founder, Kenorland Minerals

Precious Metals 9:05 AM – 9:25 AM

The recently discovered, high-grade, Regnault gold system is located in the Frotet-Evans belt of Northern Quebec, Canada, approximately 40 km south of the approximately 5 million ounce Troilus gold-copper deposit. After two passes of regional exploration, Kenorland Minerals completed an initial drill program during March 2020, during which the new, Regnault gold system was discovered. The best drill intersection from the initial drill program returned 29.08 m at 8.47 g/t gold. Multiple gold-bearing structures were also discovered over a strike length of approximately 2 km. This presentation will outline the exploration and targeting methods that lead to the new, blind discovery of a previously unknown, high-grade gold system.

LP Fault Zone: A New Gold Discovery, Red Lake District

R. Bob Singh, VP Exploration, Director, and Andrea Diakow., Exploration Manager, Great Bear Resources Ltd.

Precious Metals 9:25 AM – 9:45 AM

The 100%-owned, 9500 ha Dixie gold project (Dixie), located 15 km southeast of Red Lake, Ontario, lies near the contact between the Uchi and English subprovinces of the Western Superior geological province.

Gold in the LP fault zone at Dixie was discovered by Great Bear in the spring of 2019. The fault was first identified by 3D traveltime tomography as part of the Western Superior lithoprobe transect. In contrast to the hinge and limb zones on the property, which are typical Red Lake–style gold replacement and vein zones hosted within mafic volcanic rocks and proximal to large-scale D2 folds, the LP fault zone is hosted entirely within highly strained felsic volcanic and metasedimentary rocks.

Early exploration drilling near the LP fault zone dating back to 2003 identified widespread quartz-sericite alteration with anomalous gold values. The historical holes were sporadically sampled and were all terminated in the hangingwall of the main gold-bearing zone.

The LP fault structure can be traced through geophysics as a magnetic low for the entire span (approximately 18 km) of the property; it has been intersected by drilling for approximately 9 km and is marked by an increase in deformation, amphibolite-grade metamorphism, anomalous gold values, quartz-sericite alteration and sulfide mineralization. Gold occurs as both disseminations and in discrete structural corridors. Drilling continues on the property with five drills, as part of an ongoing 200 000 m drill program.



Discovering Fetekro's Potential to be Endeavour's Next Mine

Silvia Bottero, Endeavour Mining

Precious Metals 9:45 AM – 10:05 AM

The greenstone belts of the West African craton host numerous multi-million–ounce gold mines and count among the World's most prospective geological settings for gold exploration. The Fetekro permit, hosting the Lafigué gold deposit, sits in the northern part of the Toumodi-Fètekrô greenstone belt, which, along with the Bonikro, Hiré and Agbaou gold mines, is one of the most productive Birimian belts in Côte d'Ivoire.

The Lafigué deposit was formed during the collisional stage of the Eburnean orogeny (2.25–1.98 Ga) and is defined as an orogenic-type gold deposit. It is hosted by a Birimian volcanic complex intruded by granodioritic bodies and quartz-porphyry dikes. Its formation is related to a transpressive deformation event leading to the development of a sinistral north-northeast–south-southwest shear zone that comprises relay zones marked by east-northeast thrusts dipping south-southeast. Boudinaged fault veins and flat extension veins infilled by a quartz-calcite-tourmaline-sulfide-gold assemblage have been developed along these thrusts during the succession of hydrothermal events.

The Lafigué resource estimate now encompasses a mineralized area extending more than 2 km long by 1 km down dip with the deposit remaining open at depth and along strike.

First discovered in the mid-nineties, the global comprehension of the Lafigué deposit and the fivefold increase in resources was possible as a result of the exploration program carried out by Endeavour over the last three years. The new geological and structural model, consisting of multiple stacked lodes sub-parallel to the main gold-bearing structure, was first confirmed by scout drilling in under-explored areas then followed by infill drilling.

Efficient exploration methodology and optimization of the whole exploration process enabled the Fetekro exploration project to advance rapidly from an exploration target through resource definition, at the low discovery cost of US\$7.50 per indicated resource ounce, to a positive preliminary economic assessment, which was published in August 2020.

DeLamar Project, Idaho: Re-awakening a Giant – An Update

E. Max Baker, Integra Resources Corp.

Precious Metals 10:05 AM – 10:25 AM

The DeLamar project in southwestern Idaho is approximately 100 miles south of Boise. The historical underground mines at DeLamar and Florida Mountain started operating during **1889** and ceased in 1914 due to World War One. Mining focused on the high-grade gold-silver epithermal veins within the basement granitic rocks. The lower grade halo mineralization, which capped the epithermal veins, was mined by open pit from **1977** until 1998, when operations ceased due to low precious metal prices. In total, more than 1.6 million ounces of gold and 100 million ounces of silver have been produced to date.

Integra Resources acquired the two properties in late 2017. By late 2019, an updated mineral resource estimate and preliminary economic assessment had been completed by Integra, based primarily on 2912 historical drillholes (311 951 m) with additional confirmation drilling. The current resource stands at 3.9 million gold-equivalent ounces (Ag:Au 77:1) measured and indicated and 0.5 million gold-equivalent ounces inferred.

To date, Integra has drilled more than 200 drill holes (57 000 m) and has expanded the land holdings to approximately 20 000 acres of patented and unpatented claims and a further 7 800 acres of leased lands. In addition, Integra has completed an in-house structural analysis; conducted a regional aeromagnetic survey; collected 8500 soil and 1500 rock-chip samples; conducted more than 80-line km of induced polarization and airborne magnetic surveys; and completed geological mapping. Exploration targets resulting from this work include high-grade veins at Florida Mountain and War Eagle, potentially large extensions to the existing sulfide resources at Florida Mountain and DeLamar and grassroots high-grade vein targets in the Black Sheep district.

Mineralization at Black Sheep comprises extensive areas of sinter and opaline silica cut by high-level epithermal veining and brecciation.

BC/YUKON/ALASKA

AurMac Gold Deposit: Building a Successful Geological Model from a Geochemical Database for Intrusion-related, Stratigraphically Controlled Gold Mineralization in a Mature Precious Metals District, Mayo, Yukon

Tara Christie, Paul Gray and James Thom, Banyan Gold Corporation

BC/Yukon/Alaska 9:05 AM – 9:20 AM

At the AurMac project, north of Mayo, Yukon, 2017 to 2019 drilling together with historical drilling results culminated in the release of an initial resource estimate for the Airstrip zone and the Powerline zone on May 25, 2020. At a 0.20 g/t Au cut-off, the pit-constrained, inferred mineral resource at the Airstrip zone is 46.0 million tonnes at an average gold grade of 0.524 g/t for a total of 774 926 oz of gold. At a 0.20 g/t Au cut-off, the pit-constrained at the Powerline zone is 6.6 million tonnes at an average gold grade of 0.524 g/t for a total of 774 926 oz of gold. At a 0.20 g/t Au cut-off, the pit-constrained, inferred mineral resource at the Airstrip zone is 46.0 million tonnes at an average gold grade of 0.524 g/t for a total of 774 926 oz of gold. At a 0.20 g/t Au cut-off, the pit-constrained, inferred mineral resource measured at the Powerline zone is 6.6 million tonnes at an average gold grade of 0.610 g/t for a total of 129 019 oz of gold.

Gold mineralization at the Airstrip zone is hosted within calcareous rocks of the Mississippian–Permian Sourdough Hill unit of the Keno Hill quartzite. Banyan developed an internal, unbiased chemostratigraphic interpretation of the AurMac drilling geochemical database to create a 3D geological model of the Airstrip deposit to guide the drill programs and develop the initial resource. Banyan continues to refine the geological model and the controls on the gold distribution within these calcareous stratigraphic units, including using measurements of downhole magnetic susceptibility of all drillcore, discerning the spatial distribution of pyrrhotite-recognized association with gold mineralization.

Gold mineralization at the Powerline zone is observed within calcareous rocks and within sheeted (discordant) quartz-arsenopyrite veins; interestingly, Powerline gold mineralization exhibits a stratigraphic control akin to the Airstrip zone with the addition of a strong structurally controlled component. Banyan has developed a structural model that, together with the geological model, will provide a tool for the development of future targeted drill programs and expansion of the current mineral resource at the Powerline zone toward the historically known anomalously auriferous Aurex Hill zone, 1.6 km to the east.

<mark>λΜΕ</mark> ROUNDUP.

Tatogga Project Discovery Story

C.J. "Charlie" Greig, Vice President Exploration, GT Gold

Well known geological consultant **Charlie Greig** is the recipient of the AME 2020 H.H. "Spud" Huestis Award for significant contributions to enhancing the mineral resources of BC and/or the Yukon Territory. With more than 35 years in the mineral exploration sector, he is among the most knowledgeable and experienced geologists in BC, particularly in the mineral rich northwest area of the province known as the Golden Triangle. He is currently the VP Exploration of GT Gold Corp. where since its establishment in the autumn of 2016, he has led the exploration team that discovered and defined the very significant Saddle copper-gold and gold-silver deposits on the company's Tatogga Property located near Iskut village along Highway 37, northwest BC.

The Saddle targets on the property were first identified by soil sampling programs carried out by New Chris Minerals Ltd. in 2013 and 2014. After take-over by GT Gold Corp. and under the direction of Charlie, confirmation soil sampling in 2016 and drilling from 2017 onward resulted in the discovery of the Saddle South epithermal gold-silver system (2017) and Saddle North porphyry copper-gold system (2018). Both deposits are completely new discoveries that had not been drilled previously. Maiden Indicated plus Inferred Resources containing 4.79 billion lbs Cu and 8.93 million oz Au were announced for Saddle North in July of 2020. These figures highlight Saddle North as British Columbia's largest new copper and gold discovery. A Preliminary Economic Assessment is presently underway with anticipated completion by 2020 year-end.

As an undergraduate Charlie began his mineral exploration career as a soil sampler for SEREM Ltd. and Archer Cathro & Associates in BC and Yukon during the early-mid 1980s and quickly developed a nose for prospecting. He then went on to eventually complete Masters and Doctoral Degrees at UBC and the University of Arizona respectively, by conducting research and mapping projects in southern and northern BC for the Geological Survey of Canada and British Columbia Geological Survey. In 1995 he returned to the industry sector and founded the consulting firm C.J. Greig & Associates Ltd. where he continues to serve as President.

C.J. Greig & Associates Ltd. has developed into a very reputable consulting firm providing comprehensive services throughout BC and occasionally much further afield including internationally. Its team is broadly experienced and is known for advancing mineral exploration projects with efficiency and professionalism. Charlie and his team have added significant value to several other exploration programs in the Golden Triangle district through past work at and around the Brucejack Mine (Pretium Resources), Red Mountain (Lac Minerals, IDM), and Silbak Premier (Westmin, Ascot). Charlie is also presently an Advisor to recently formed Evergold Corp. which is actively exploring a portfolio of his personally long-held high priority northern BC precious and base metal prospects.

In recognition of his outstanding achievements, continuing enthusiasm and commitment to excellence in exploration particularly for the benefit of BC, as well as his great talent for mentorship of many young field geologists, AME is honoured to present C.J. ("Charlie") Greig with the prestigious H.H. "Spud" Huestis Award.



Geology of the Lawyers Project: Gold and Silver Within the Toodoggone District of British Columbia

Malcolm Dorsey, Benchmark Metals Inc.

BC/Yukon/Alaska 9:35 AM – 9:50 AM

Located within the prolific Toodoggone district, the district-scale, 140 km² Lawyers gold and silver project is situated on the eastern portion of an arch of gold and polymetallic mineralization referred to as the Golden Horseshoe, which is composed of epithermal and porphyry deposits and prospects that extend across the northern Stikine Terrane. Within the northeastern Stikine Terrane, the Toodoggone district is characterized by a disconformable stratigraphic succession of Permian to Late Triassic marine and volcanic strata overlain by a thick accumulation of volcanic and sedimentary strata of the Early Jurassic Toodoggone Formation. Within the Toodoggone Formation are a significant number of Early Jurassic, low- and high-sulfidation, epithermal-type deposits that characterize the mineralization found at the Lawyers project.

Situated within an extensive mineralized corridor, the Lawyers project epithermal-type deposits are hosted by andesitic and dacitic volcanic rocks along a fault-bounded extensional volcano-tectonic trough. Nearby are Early Jurassic stocks and plugs thought to have been emplaced contemporaneously with porphyry potassium-silicate alteration at depth and the formation of epithermal-type deposits, resulting in a range of episodic mineralization types throughout the central Toodoggone district. Exploration in the Lawyers area began in the 1960s and with the discovery of epithermal-type mineralization continued through to the late 1980s, culminating in three years of small-scale mining of high-grade trends at the AGB occurrence.

Since its acquisition in 2018, Benchmark Metals has rapidly advanced the Lawyers project by identifying significant extensions of high-grade and bulk tonnage mineralization that remains open along strike and at depth. Along with a number of successes in 2020, new discoveries continue to demonstrate the abundance of near-surface gold and silver potential across an expansive 20 km trend. We are very excited to present project updates and our future plans for further developing the upside potential of the Lawyers gold and silver project.



Tibbs Gold Project – Mineralization Styles and the Gneiss Frontier

Eric Buitenhuis, Tectonic Metals Inc.

BC/Yukon/Alaska 9:50 AM – 10:05 AM

The Tibbs gold project is located in the Goodpaster mining district, 35 km east of the Pogo mine. The project sits within the Black Mountain tectonic zone (BMTZ), a district-scale, northeast-trending structural corridor centred on the project area. Mineral prospects occur along the western boundary of the mid-Cretaceous Black Mountain intrusion, where it is in contact with Devonian biotite gneiss and augen gneiss to the west. In the property area, the BMTZ occurs as a series of northeast– to north-northeast–trending, normal and left-lateral, high-angle, strike-slip faults.

At least two styles of gold mineralization have been observed at the project: 'proximal' Au+Bi±As±Te±W mineralization in quartz veins at the Gray Lead and Hilltop/Oscar prospects, and 'distal' Au+As+Sb mineralization in quartz veins and wallrock disseminations at the Michigan, Blue Lead, Grizzly Bear, Upper/Lower Trench, O'Reely and Wolverine prospects. At the Gray Lead prospect, a quartz–arsenopyrite±pyrite±bismuthinite±jamesonite vein attaining widths of up to 4 m was formed at temperatures from 260–455 °C, and pressures of more than 1700 bar. In the east of the project, quartz-stibnite-arsenopyrite veins and stockworks are found within sericitized granodiorite, notably at the >1 km long, northeast-trending corridor that defines the Michigan prospect. Both styles of mineralization are believed to represent components of a single intrusion-related gold system, with a deeper, hotter, higher pressure setting for Gray Lead–style mineralization, and a higher level, cooler, lower pressure, outboard setting for mineralization at Michigan.

Mineralization observed to date appears to be controlled by high-angle faulting within the BMTZ; however, lowangle faults and shears mapped within the gneissic rocks in the west may represent a target environment similar to the Liese veins at the Pogo gold deposit, where quartz veins are found within reactivated low-angle shear structures.

N'tsi Tatay – A New Look at Windy Craggy

Bruce W. Downing, Industry Consultant; Rick Van Nieuwenhuyse, President and CEO, Contango Ore Inc.; James Allen (former chief Champagne Aishihik First Nations)

BC/Yukon/Alaska 10:05 AM – 10:20 AM

N N'tsi Tatay (Windy Craggy) in northwestern British Columbia is one of North America's largest resources of cobalt, with excellent copper, zinc, gold and silver grades hosted in an Upper Triassic Besshi-style volcanogenic

massive sulfide. This deposit occurs within the Triassic Alexander metallogenic belt, which has excellent potential for future discoveries. The deposit and enclosing host rocks have been metamorphosed to greenschist grade.

The historical Southern Tutchone translation of N'tsi (windy) Tatay (mountainous) is Windy Craggy. N'tsi Tatay is within the traditional territory of the Champagne and Aishihik First Nations, whose ancestors include Kwäday Dän Ts'inchi (Canadian Ice Man, discovered in 1999).

The deposit is composed of three vertical massive sulfide zones termed North, South and Ridge. The 1992 non-NI 43-101–compliant historical resource estimate is 297 million tonnes grading 1.38% copper, 0.069% cobalt, 0.20 g/t gold and 3.83 g/t silver using a 0.5% copper cutoff grade. This estimate should be considered a minimum because a new zinc-rich (Ridge) zone was discovered at the end of the last drilling campaign in 1990 and remains open. In addition, a supergene zone enriched in copper includes chalcocite, native copper and chalcanthite and is capped by gold-silver–rich gossans.

Significant gold is associated with a chert-carbonate-sulfide unit. One drill hole (83-14) intersected 29.7 m grading 14.72 g/t gold with microscopic native gold and electrum occurring as grains 7-8 \square m in diameter.

Mineralization is composed of chalcopyrite, pyrrhotite, pyrite and sphalerite with lesser marcasite, galena, digenite, arsenopyrite, an unidentified bismuth telluride, cobaltite, cubanite, native gold, electrum and native silver. Cobalt generally occurs within the sulfides (primarily pyrrhotite) as a solid solution. Primary textures and geological relationships are mostly well preserved. Gangue components include quartz, iron carbonates, magnetite, chlorite and calcite.

From 1988 to 1991, approximately \$50 million was spent completing 4139 m of underground development, 64 618 m of diamond drilling from surface and underground drill sites, and a preliminary feasibility study.

N'tsi Tatay was discovered in 1957 during prospecting under the supervision of James McDougall (inducted into the Canadian Mining Hall of Fame in 2006). After years of highly successful exploration the project was shuttered in 1993 by inclusion in a park. This was done without due consultation and compensation for the land claims and ancestral territory of the rightful First Nation owners. This event has led to an unparalleled historical legacy of more than \$1 billion invested and spent on bringing other mineral deposits to fruition but without benefits for the Champagne and Aishihik First Nations.

Recent innovations in recovery technology, mine development, block caving, back fill paste and dry stack tailings storage techniques, and environmental management and mitigation strategies combined with Canada's recognition and implementation of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), necessitate that this high-quality resource be granted another look 63 years after its discovery.

In a world that values a green economy requiring huge amounts of copper and ethically sourced cobalt, N'tsi Tatay warrants consideration. There are numerous social and economic benefits of this development for all stakeholders. Now is the time to showcase a vision of development based on ownership and leadership by an Indigenous Nation entity that respects their culture, the environment, park sustainability and economic realities.

BASE METALS

Discovery of the Crawford Nickel-Cobalt Sulphide Project, Timmins, Ontario

Mark Selby, Chairman & CEO, Canada Nickel Company

Base Metals 9:05 AM – 9:35 AM

The Crawford Nickel Sulphide Deposit (the "Crawford Deposit") is the largest nickel discovery since Thompson, Manitoba and has more contained nickel than Voisey's Bay, Labrador. The discovery was made in 2018 and since then more than 80 exploration holes have been drilled, a 1.6 billion tonne resource has been defined, and a preliminary economic assessment is being prepared for release in 2021.

The Crawford Deposit is located north of Timmins, Ontario, within 12 km of the world-class Kidd Creek copperlead-zinc mine. The deposit was identified by utilizing the unique geophysical signature of the Dumont nickel deposit, a more advanced project of similar deposit type that has a recently updated 43-101 report giving the project a US\$1 billion NPV. Airborne magnetics over Dumont outlines the strongly magnetic peridotite which surrounds the less-magnetic but better-mineralized dunite. Ultramafic intrusions typically contain nickel locked up within the silicate minerals. Dumont and Crawford, however, have a substantial amount of nickel in sulphide due to serpentinization. The geophysical footprint was searched for on the large land package owned by Noble Mineral Exploration (Noble) where Inco had flown a regional airborne magnetic (MAG) and electromagnetic (EM) survey in the early 1960s. The area was active for exploration after the discovery of the Kidd Creek Deposit in 1963 and drilling at Crawford resulted in a handful of thick intervals of low-grade, nickel-bearing mineralization in peridotite and dunite with a note in the core logs of strong serpentinization.

In 2018 a joint venture was established between Spruce Ridge Resources, Noble, and a group of private investors to explore Noble's extensive land holdings north of Timmins. Four drill holes were drilled, two to explore well inside the dunite and two drillholes to cross each contact. All four holes yielded substantial intersections of serpentinized dunite containing enough sulphur to allow for the formation of nickel sulphide minerals with the potential to deliver high grade concentrates. Since the discovery, Canada Nickel has been active expanding the resource from the initial discovery and having other similar regional targets which it has optioned from Noble.

λΜΕ ROUNDUP.

IsoEnergy's Hurricane Zone – A New High-grade Uranium Discovery in the

Athabasca Basin, Saskatchewan

Andrew Carmichael, Justin Rodko, Faizan Shah, Steve Blower and Craig Parry, IsoEnergy Ltd.

Base Metals 9:35 AM – 10:05 AM

Located along the fertile Larocque conductor trend, IsoEnergy Ltd.'s Hurricane zone is a new discovery of highgrade, unconformity-related uranium mineralization in the northeastern portion of Saskatchewan's Athabasca Basin. The Hurricane zone was discovered with IsoEnergy's first drill hole ($8.5 \text{ m} @ 1.3\% \text{ U}_3\text{O}_8$ in drill hole LE18-01A) on the Larocque East property, just 10 weeks after the property was acquired.

Located 320 m below surface, mineralization is polymetallic (uranium, nickel and cobalt) and straddles the flatlying sub-Athabasca unconformity or is perched in the sandstone immediately above it. Anomalous concentrations of uranium and uranium pathfinder elements have been intersected throughout the overlying Athabasca Group sandstone in several drill holes. Similar to many Athabasca uranium deposits, mineralization is strongly structurally controlled and is spatially related to the intersection of graphitic fault zones with the unconformity. At Hurricane, brittle reactivation of east-west-oriented fault zones has created a subtle ridge in the basement, the top of which is the preferred location for uranium mineralization. Following up on the 2018 discovery hole, 29 drill holes were completed in 2019 and an additional 48 drill holes in 2020. Hurricane has now grown to at least 575 m long, up to 75 m across, and up to 11 m thick. The best intersection to date is 7.5 m @ 38.8% U₃O₈ in recent drill hole LE20-76, including 3.5 m @ 74.0% U₃O₈.

The target for the discovery drill hole was the unconformity beneath a zone of sandstone alteration and elevated uranium geochemistry in historical drill hole KER-12, located immediately east of the western property boundary along the Larocque conductor trend. The trend hosts significant uranium mineralization at the Larocque Lake zone and the Larocque North zone, both of which are located on the neighbouring property to the west. Although several features contributed to the top tier ranking of the target, its location along the Larocque trend and proximity to several weakly mineralized drill holes was paramount.

The Larocque East property encompasses approximately 15 km of the Larocque conductor trend, much of which is characterized by highly illitic sandstones above strong basement conductors that are only sparsely drilled.

Discovery of the World-class Onto High Sulfidation Porphyry Copper-Gold Deposit, Sumbawa Island, Indonesia

Fabio Masotti, David Burrows, Vale Global Exploration; Michael Rennison, David Burt, Vale Global Exploration (now Cobre Nuevo Exploration Pty Ltd); Rod Davies, Cobre Nuevo Exploration Pty Ltd; Richard Hague, Michael Hillier, PT Vale Eksplorasi Indonesia; Nur Tyas Mudadi, Gina Pariana and Kristison Situmorang, PT Sumbawa Timur Mining; Rachmat Pratiwinda, PT Vale Eksplorasi Indonesia; Za Munarfan Putra, Fahmi Setiawan, Douglas Simaremare and Nurhadi Wibowo, PT Sumbawa Timur Mining; Peter Winterburn⁺, Vale Global Exploration

† Deceased

Base Metals 10:05 AM – 10:30 AM

The Onto high-sulfidation porphyry copper-gold deposit, located in southeast Sumbawa Island, Indonesia, was discovered in 2013 as part of a target testing program at the Hu'u contract of work (CoW), held by Vale (80%) and PT Antam (20%). It contains a JORC-compliant indicated resource of 0.76 billion tonnes @ 0.93% Cu and 0.56 g/t Au and an inferred resource of 0.96 billion tonnes @ 0.87% Cu and 0.44 g/t Au, for a total of 15 million tonnes and 27 million ounces of contained copper and gold, respectively.

The Onto target comprises a magnetic anomaly, a weak copper soil anomaly and the presence of covellitemineralized clasts in breccia at surface. The first drill hole testing this target, VHD034, intersected 287 m @ 0.97% copper and 1.13 g/t gold from 548 m in vuggy-textured residual quartz and quartz-alunite alteration below a sequence of barren rocks.

The deposit, which does not outcrop, is more than 90% hosted in quartz-alunite±pyrophyllite advanced argillicaltered intrusive porphyry stocks intruding a polymictic diatreme vent complex breccia, sitting below a weakly altered sequence of andesites. The mineralization comprises mostly disseminated covellite and pyrite-covellite veinlets in a tabular block measuring at least 1.5 km \times 1 km with a vertical extent of \geq 1.5 km. Adding to Onto's uniqueness, radiometric dating reveals that it was formed during the last 500 000 years.

Onto was discovered during Vale's strategic efforts, commencing in the early 2000s, to expand and diversify its exploration efforts into porphyry copper. Vale's entry into exploration in Indonesia followed the acquisition of Inco in late 2006, which already had a functioning service exploration company in the country. A strategy was defined to pursue farm-in deals in still valid CoWs and to target projects with favourable porphyry indicators in the lithocap environment, which had already been one of the focus of the company's programs in Asia.



ADDITIONS TO THE GEOSCIENCE TOOLBOX

Use of Machine Learning to Quantify the Opportunity Cost of Land Withdrawal Alternatives

Warwick Bullen, Yukon Geological Survey

Additions to the Geoscience Toolbox 1:35 PM to 1:50 PM

Yukon Geological Survey generates mineral potential maps for land-use planning purposes using data- and knowledge-driven methods. The mineral potential data are captured in a 2-D block model and assessed using a value-optimization machine-learning algorithm that was developed in-house. The machine learning process is iterative in nature, involving a stepwise assessment of land packages of decreasing size/increasing mineral potential.

The outputs of the machine learning assessment include

- value-optimized mineral potential categories (used for mineral potential mapping);
- value-added multiple maps (delineation of areas of equivalent value-accretion); and
- opportunity cost determinations to quantify the impact of proposed land withdrawals on exploration value.

The machine-learning algorithm allocates value using the cost approach to valuation method (CIMVAL, SAMVAL, etc.), which is based on the concept that an exploration property is worth what someone has spent on it, or is willing to spend on it. The value concept assumes implementation of industry-standard exploration methodologies (i.e., professionally managed and executed exploration programs).

The algorithm generates a number of attributes, including average mineral potential and optimal value. The latter is a function of area size and mineral potential, and quantifies the exploration value-added potential of different land packages. The highest, or peak, optimal value delineates land parcels with the greatest exploration value-added potential, and quantifies the value added.

The difference between the peak optimal values of two land packages (e.g., before and after a proposed land withdrawal) provides a direct measure of the opportunity cost, or the degree of value destruction, of the proposed withdrawal. Similarly, the peak optimal values of two (or more) proposed land withdrawal alternatives quantify the opportunity cost of the withdrawals, indicating which is least/more value destructive and, importantly, to what extent.

Opportunity cost analysis using machine learning provides a powerful way to measure the impact of land withdrawal alternatives on exploration value, and is a useful tool in trade-off studies.

<mark>λΜΕ</mark> ROUNDUP.

Atmospheric Mercury Vapour Haloes Uncover Ore Deposits and Fault Structures

Alexei S. Rukhlov, Luke Ootes, Adrian S. Hickin, BC Geological Survey; Nikolay R. Mashyanov, Lumex-marketing LLC, Russia

Additions to the Geoscience Toolbox 1:50 PM – 2:05 PM

Volatile geogenic components, such as carbon dioxide, helium, radon and mercury, form haloes in soil gas and near-surface air directly above ore deposits. This contrasts with lithochemical, hydrochemical and biochemical dispersion haloes, which can be laterally displaced. Mercury vapour surveys have been used in exploration because mercury occurs in most ore deposit types, is highly mobile and constantly cycles between rocks, soil, water, atmosphere and biota. Low background air concentrations (1.2 to 1.5 ng/m³) enable the detection of even weak mercury haloes of ore deposits.

Soil gas sampling is a common technique, but it is not suitable for outcrops and moist soils, and it is slower compared to sampling near-surface air. For this study, we have measured mercury vapour 1–50 cm above ground at 15 locations that include known ore deposits, fault structures, and barren rocks on Vancouver Island. Continuous monitoring of ultra-low mercury concentrations was achieved with a portable RA-915M mercury analyzer with a concentration detection range of 0.5–20 000 ng/m³ and a response time of 1 s. Weather parameters (wind speed, air temperature, etc.) were simultaneously measured using a Kestrel 5500 weather meter.

Our results show that mercury vapour concentrations range from 0.5 to 54.4 ng/m³, with the strongest anomalies marking auriferous and Cu-Ag-Au sulfide veins at Goldstream, epithermal Au-Ag-Cu at Mount Washington (up to 9 times background mercury), and sediment-covered polymetallic volcanogenic massive sulfide at the Lara occurrence (4–7 times background mercury). Basalt-hosted Cu-Ag-Au sulfides at Sunro, in addition to the Leech River fault and other faults, are all marked by weak mercury vapour anomalies relative to local background. The study finds that the mercury detection can be influenced by weather, but regardless, the real-time mercury vapour sampling of near-surface air can instantly delineate ore zones and fault structures that are buried under cover.

Mineralogical and Geochemical Vectors within Advanced Argillic-altered Rocks of British Columbia

Farhad Bouzari, Robert G. Lee and Craig J.R. Hart, MDRU – Mineral Deposit Research Unit, The University of British Columbia; Bram I. van Straaten, BC Geological Survey

Additions to the Geoscience Toolbox 2:05 PM – 2:20 PM

Advanced argillic alteration zones that potentially represent the tops of porphyry copper deposits are preserved in several locations in British Columbia. Mineral assemblages and rock compositions across advanced argillic alteration zones at Tanzilla (Dease Lake), Alunite Ridge and Kemess North (both in the Toodoggone district), were evaluated by mapping, petrography, shortwave-infrared spectroscopy and geochemical analyses.

The central parts of advanced argillic alteration zones typically consist of strong silicification that locally include topaz, andalusite, alunite and pyrophyllite. These are zoned outward to sericite and clay (kaolinite-dickite), forming white to grey sericite-(clay) alteration. Surrounding this are pale-green sericite assemblages that transition distally to zones of green sericite-chlorite alteration. More distally, the proportion of the chlorite increases and an assemblage of chlorite-epidote-(sericite) occurs near the least-altered rocks.

Geochemically, both Na and Ca are strongly depleted in advanced-argillic altered rocks, whereas K is fixed with sericite, so a Na-Ca depletion index is developed. Zones of intense advanced-argillic alteration have the highest Na-Ca depletion index, with the index gradually decreasing distally.

The application of the MDRU porphyry index (MPIx) indicates the vertical exposure level of porphyry-epithermal systems. Kemess North has the highest MPIx and represents the deepest level of alteration; Tanzilla shows intermediate values and Alunite Ridge has the lowest MPIx, which represents the shallowest signature. A new porphyry index, MDRU porphyry index-lateral, is developed to map lateral footprints in the upper parts of porphyry systems. The MPIx-lateral compares metals that are enriched in the shallow parts (Sb, As, Tl) to those that are more laterally dispersed and have higher concentrations in distal parts of the porphyry system (Zn, Mn).

The application of mineral mapping and rock geochemistry indicates zones of high fluid flow in the central parts of advanced argillic alteration that typically form above a porphyry centre and provide tools to vector toward zones of copper mineralization at depth.

<mark>λΜΕ</mark> ROUNDUP.

Automated Indicator-Mineral Analysis of Till: A Promising Exploration Tool for Porphyry Copper Mineralization

Alain Plouffe, Geological Survey of Canada; Derek H.C. Wilton, Memorial University of Newfoundland; Rick McNeil, Geological Survey of Canada; Travis Ferbey, BC Geological Survey

Additions to the Geoscience Toolbox 2:20 PM – 2:35 PM

Previous studies have indicated that heavy mineralogy (specific gravity [SG] = 2.8–3.2 and >3.2) of the medium sand fraction (0.25–0.50 mm) of till contains porphyry copper indicator minerals (PCIM) derived from mineralization or alteration zones. To improve the PCIM method for mineral exploration, we analyzed the heavy mineralogy (>3.2 SG) of the fine sand fraction (0.125–0.180 mm) of till using an automated method that combines scanning electron microscopy (SEM) and mineral liberation analysis (MLA). The MLA-SEM method identifies minerals based on grain composition determined by SEM–energy dispersive spectroscopy. The MLA-SEM results show anomalous patterns with greater abundance of PCIM in till near porphyry copper mineralization compared to background regions. We conclude that MLA-SEM analysis of the fine sand heavy mineral concentrate (HMC) fraction of till can be used in exploration for porphyry copper mineralization. We estimate 5–8 kg of bulk till is sufficient to prepare 0.3 g aliquots of fine sand heavy minerals for MLA-SEM; this mass is smaller than the 9–15 kg required for optical mineral analysis of the medium sand HMC fraction. Smaller field samples can lower costs for reconnaissance mineral exploration.



Using Soil Gas to Identify Bedrock Mineralization and Geological Faults Beneath Glacial Deposits

Ray Lett, Emeritus Scientist, BC Geological Survey; Dave Sacco, Senior Surficial Exploration Specialist, Palmer

Additions to the Geoscience Toolbox 2:35 PM – 2:50 PM

Studies in glaciated and non-glaciated terrain demonstrate that variations in soil gas carbon dioxide and oxygen concentrations can be related to the presence of geological structures and concealed sulfide mineralization. Typically, the soil-gas measurements made during these studies require either cumbersome and relatively expensive instruments or gas capture, onsite storage and later laboratory analysis . A simple, portable and real-time measurement system has now been developed. The prototype comprises small carbon dioxide and oxygen sensors installed in a waterproof case; a battery-powered pump; and a hollow, steel soil probe. Soil gas is pumped through the probe into the system, where the sensors measure carbon dioxide and oxygen concentrations, barometric pressure, temperature and relative humidity. System set-up and data collection at a sample site can typically be completed in about 20 minutes, providing rapid, real-time measurements to inform mineral exploration activities.

The reliability and functionality of the system has been tested at the Leech River fault zone, north of Jordan River, British Columbia, and at the Mouse Mountain and Shiko Lake porphyry copper-gold occurrences and the Mount Milligan copper-gold mine in central British Columbia. These tests consistently measured elevated carbon dioxide and depleted in oxygen concentrations over inferred faults compared to the surrounding rocks. In addition, analysis of B-horizon soil samples for pH and water-soluble trace elements indicate a spatial association between the soil-gas anomalies and soil chemistry. This presentation will review the testing of the real-time soil gas measurement system and discuss why it belongs in the mineral explorer's toolbox.



CORE SHACK

APPIA ENERGY CORP.

ALCES LAKE: HIGH-GRADE REE AND GALLIUM IN NORTHERN SASKATCHEWAN

James Sykes, Vice-President Exploration & Development, Appia Energy Corp.

The Alces Lake project hosts some of the world's highest concentrations of REE and gallium ("Ga") ever discovered. The elements are hosted within simple mineralogy; 100% monazite. Extraction of REEs from monazite has been economically proven and established since the 1950s. High-grade monazite outcrops and drill hole intersections comprise 16.65 wt% total rare earth oxide ("TREO") (or 27% monazite), on average, and locally up to 53.01 wt% TREO (or 85% monazite). The monazite are enriched with critical elements, such as neodymium, praseodymium, dysprosium and terbium, which account for approximately 23 to 25% of the REE grades.

The REE+Ga bearing minerals system is hosted within a polyphase anatexite containing massive biotite-rich schist and quartzo-feldspathic pegmatite augen. The minerals system has been observed to clearly cross-cut previously solidified gneissic material, suggesting late orogenic development, further complimented with a monazite crystallization age of 1927.1 +/- 1.2 Ma, which puts it in the last quarter of the Taltson-Thelon Orogeny. The geological suite at Alces Lake is part of a regional synformal anticline, with outcrop-scale folds having shown to influence the deposition of monazite (but not in all cases).

To date, Appia has discovered 74 individual REE surface zones and occurrences, including the WRCB zone. The company has also completed a total of 4884.55 metres of diamond drilling in 78 diamond drill holes, with over 95% drill hole intersection success rate. Diamond drilling has successfully intersected the REE minerals system in two sub-parallel trends over 875 m strike length, as deep as 340 m from surface, and remains open in all directions. Surface outcrops and near-surface drill intersections of the high-grade WRCB zone have confirmed continuity over 145 m strike length and down to 10 m depth from surface. To date, less than 1% of the property has been explored with diamond drilling.



ARIZONA METALS

ARIZONA METALS CORP (AMC-V): EXPLORING FOR HIGH-GRADE CU-AU-ZN-AG VMS DEPOSITS IN ARIZONA

Marc Pais, President and CEO, Arizona Metals Corp

Arizona Metals Corp owns 100% of the Kay Mine Property in Yavapai County, which is located on patented and BLM claims totaling 1300 acres. A historic estimate by Exxon Minerals in 1982 reported a "proven and probable reserve of 6.4 million short tons at a grade of 2.2% copper, 2.8 g/t gold, 3.03% zinc, and 55 g/t silver". The Kay Mine is a steeply dipping VMS deposit that has been defined from a depth of 60 m to at least 900 m. It is open for expansion on strike and at depth. A Phase 1 drill program of 6,700 m in 20 holes was completed in September 2020. Highlights included hole KM-20-13 which intersected 43 m of 3.9% CuEq (incl. 15 m of 6.7% CuEq) and KM-20-09 which intersected 6.1 m of 7.8 g/t AuEq. A Phase 2 expansion program of 11,000m in 29 holes is scheduled to being in January 2021.

Arizona Metals Corp also owns 100% of the Sugarloaf Peak Property, in La Paz County, which is located on 4,400 acres of BLM claims. Sugarloaf is a heap-leach, open-pit target and has a historic estimate of "100 million tons containing 1.5 million ounces gold" at a grade of 0.5 g/t.

*The Kay Mine and Sugarloaf Peak historic estimates have not been verified as current mineral resources. None of the key assumptions, parameters, and methods used to prepare the historic estimates were reported, and no resource categories were used. Significant data compilation, re-drilling and data verification may be required by a Qualified Person before the historic estimates can be verified and upgraded to be current mineral resources. A Qualified Person has not done sufficient work to classify them as current mineral resources, and Arizona Metals is not treating the historic estimates as current mineral resources.

AZIMUT EXPLORATION

ELMER GOLD DISCOVERY, JAMES BAY REGION, QUEBEC, CANADA

François Gagnon, P.Geo., Project Manager; Mathieu Landry, P.Geo., Vice President Technology and Business Development, Jean-Marc Lulin, P.Geo., Ph.D., President and CEO, Azimut Exploration Inc.

Elmer is a new gold discovery in the James Bay region of Quebec. Azimut's wholly owned property is situated in the La Grande Archean Subprovince in the northeastern Superior Province, specifically in the Lower Eastmain greenstone belt. The property consists of 515 claims (271.3 km²) over a 35-km strike length, located 800 km north of Montreal, 60 km east of the village of Eastmain and 115 km west of the Eleonore mine (Newmont) and benefits from quality infrastructure nearby (permanent road, airport, power grid).

Drilling to date has traced a consistently mineralized zone concordant with schistosity over a strike length of 500 m and to a depth of 250 m. This steeply dipping zone reaches up to 80 metres thick and remains open in all directions. Major intervals include:

- 3.15 g/t Au over 102 m including 10.1 g/t Au over 20.5 m
- 3.01 g/t Au over 90.20 m including 13.82 g/t Au over 14.2 m
- 2.61 g/t Au over 72.15 m including 29.24 g/t Au over 4.95 m

Elmer is considered an orogenic gold-bearing system within a 3-km-thick felsic volcanic sequence with porphyritic intrusions, mafic volcanics and gabbroic sills. The mineralization is mainly related to quartz-vein networks and their host rocks, with pyrite as the dominant sulfide occurring as fine to coarse disseminations, crosscutting stringers or semi-massive to massive lenses. Native gold grains are frequent. Alteration comprises of pervasive silica, chlorite, sericite, carbonate and tourmaline.

The intensity of quartz veining may be partly controlled by the rheologic contrast between the host felsic lithologies and mafic lithologies within a more extensive shear zone.



BLUESTONE RESOURCES

CERRO BLANCO LOW SULFIDATION GOLD - SILVER DEPOSIT, GUATEMALA

David Cass, Vice President of Exploration, Bluestone Resources Inc.

The Cerro Blanco project in Guatemala is one of the worlds very few high-grade gold deposits permitted for development. Cerro Blanco is a classic hot springs-related low-sulfidation epithermal system exhibiting both high-grade vein and low-grade disseminated mineralization. The project has more than 3 km of underground development and 160 000 m of drilling undertaken to date. In late 2019 Bluestone published an updated high-grade underground resource estimate that identified 1.4 million ounces grading 10.3 g/t Au in M+I categories.

High-grade mineralization is hosted in the sedimentary Mita unit as two upward-flaring vein arrays that converge downwards and merge into basal feeder veins where drilling has demonstrated significant widths of high-grade mineralisation e.g. 21.4 m grading 10 g/t Au and 35 g/t Ag. Bonanza gold grades are associated with ginguru banding and carbonate replacement textures. Sulfide contents are low, typically <3 volume %.

Overlying the Mita rocks, the Salinas unit hosts low-grade disseminated gold mineralization in silicified polymictic conglomerates and aphanitic rhyolites. Complete preservation of the system is indicated by siliceous sinter beds formed by surficial hot-spring activity at the paleosurface. Total in-situ gold resources, including the high-grade veins in the Mita unit and low-grade disseminated mineralization in overlying Salinas rocks are 2.99 million ounces in M+I categories (61 million tonnes at 1.5 g/t Au).

Cerro Blanco formed immediately beneath and within a fault-bounded graben in a back-arc rift setting characterized by bimodal volcanism. The features observed at Cerro Blanco are common to many shallowly-eroded, low- and intermediate-sulfidation epithermal deposits and a direct comparison can be made with Fruta del Norte in Ecuador and Ivanhoe in Nevada. The pristine nature of the veins at Cerro Blanco can be explained by the complete preservation of the system part-owing to the very young age of the deposit and paucity of post-mineral faulting.

BRIXTON METALS CORPORATION

HOG HEAVEN AG-AU-CU PROJECT, NW MONTANA, USA

Gary R. Thompson, Brixton Metals Corporation

The Hog Heaven project is located in Flathead County, northwest Montana, USA and is a high-sulfidation system with a very high silver to gold ratio. Mineralization is hosted within the Cenozoic Hog Heaven volcanic field, a 30 to 36 Ma suite that consists predominantly of rhyodacite flow-dome complexes and pyroclastic rocks. The Hog Heaven volcanic field is underlain by shallow-dipping siliclastic sediments of the Mesoproterozoic Belt Supergroup. These sediments are known to host important SEDEX deposits such as the giant Sullivan Pb-Zn-Ag deposit in British Columbia and red-bed copper-silver deposits like Rock Creek and Montanore within Montana. These younger volcanics and intrusives erupted through and deposited on the Belt strata during a period of Oligocene extension.

Alteration patterns characteristic of volcanic-hosted, high-sulfidation epithermal deposits have been identified. Vuggy quartz transitions laterally into quartz-alunite alteration where large sanidine phenocrysts (up to 4 cm) have been replaced by fine-grained, pink alunite, and/or argillic alteration that is marked by an abundance of white kaolinite-dickite clay. Reflected light microscopy and SEM-EDX identified three mineralizing stages, consisting of Stage 1 enargite-pyrite-alunite-APS-bismuthinite, Stage 2 Ag-Pb-Sb-Bi sulfosalts, and Stage 3 sphalerite-galenabarite. Retrograde reactions created complex intergrowths of the Ag-Pb-Sb-Bi sulfosalts. Galena, pyrite and marcasite are prevalent throughout the deposit and in each stage of mineralization.

In 2017, Brixton Metals acquired the project and compilated the historic data into 3D models. In 2020, Brixton Metals drilled seven holes totaling 1386 m to confirm some of the 722 holes of historic drilling from the 1970s and 1980s. Hole HH20-02 cut 225 m of 78 g/t Ag, 0.66 g/t Au and 0.24% Cu, including 5.5 m at 446 g/t Ag, 1.4 g/t Au and 1.5% Cu and including 7 m of 259 g/t Ag, 2.7 g/t Au and 1.2% Cu. Past production was about 7 million ounces Ag at 902 g/t Ag, plus Au-Pb-Cu.



DOLLY VARDEN SILVER

DOLLY VARDEN SILVER MINING CAMP, NORTHERN BRITISH COLUMBIA, CANADA

Rob van Egmond, Chief Geologist, Dolly Varden Silver Corporation; Chris Sebert, Senior Consulting Geologist, Dolly Varden Silver Corporation

The Dolly Varden Mine (1919-1921) and Torbrit Mine (1949-1959) were past producing high-grade silver operations located at the southern end of the Golden Triangle in northwestern British Columbia, Canada. Within the Dolly Varden Silver Camp there are multiple silver and base metals mineralized deposits of both volcanogenic related and epithermal style. The 2020 exploration program consisted of 11 396 metres of diamond drilling in 40 drill holes, exploring the volcanogenic fertile horizon within the Upper Hazelton rocks as well as expanding and infilling within the Torbrit deposit.

There are several styles of mineralization, including: i) siliceous stratibound exhalative horizons; ii) collapse, and; iii) epithermal breccias cross cut by later epithermal quartz veins. The Dolly Varden-Torbrit Horizon ("DVTH") is marked by a distinctive upper zone of jasper and quartz breccias and stockworks, with bladed barite pseudomorph textures and colloform banding, overlying a lower zone of smoky silica and sulfides with barite rich horizons. These stratiform layers were subsequently brecciated by continuing epithermal activity as well as by collapse breccias. Mineralization consists of acanthite, native silver, pyrargyrite, pyrite, galena and sphalerite.

Structurally, the deposits are hosted in basins formed during the Eskay rifting period contemporaneous with Jurassic Hazelton Group volcaniclastics deposition. Cretaceous compressional events have formed a northward-plunging synform with trust faulting. Epithermal veins are typically steeply-oriented and follow syn-basinal bounding structures.

2020 drill results received to date include hole DV20-211 that yielded 351 g/t silver over 12.75 m, including 1083 g/t silver over 2.70 m, drilled at the southern edge of the Torbrit deposit and hole DV20-217 with 302 g/t silver over 31.95 m, including 642 g/t silver over 4.00 m from infill within the Torbrit deposit (true thickness is 80-95% core lengths).

Overall, the exploration programs illustrate the potential for further discovery of high-grade silver in the historic Dolly Varden Mining Camp.

ENDEAVOUR MINING

FETEKRO PROFILED: LAFIGUÉ, FETEKRO IN CÔTE D'IVOIRE

Martino De Ciccio, VP Strategy & Investor Relations, Endeavour Mining; Silvia Bottero, VP Exploration Côte d'Ivoire, Endeavour Mining

The Lafigué deposit within Endeavour's Fetekro exploration licence is located in north-central Côte d'Ivoire, approximately 500 km from Abidjan, within the northern end of the Oumé-Fetekro Greenstone Belt. It is located next to existing infrastructure, including sealed roads and power. The Fetekro property was ranked as a top greenfield target following Endeavour's strategic exploration review completed in late 2016. The Lafigué resource estimate now encompasses a mineralized area extending over 2km long by 1km downdip with the deposit remaining open at depth and along strike. The current Indicated resource estimated for the Lafigué deposit is 2.5 million ounces at 2.40 g/t Au.

The Lafigué prospect is hosted by an east-north-east trending reverse faulting zone, which is locally bounded by two northeast-trending steep oblique-reverse shear corridors subparallel to the main Birimian structural grain. The lens-shaped mineralization of Lafigué appears to be hosted within a network of stacked and mineralized brittle-ductile reverse shear zones, dipping 20° to 30° to the south-southeast. They developed mostly within the hanging-wall of a possible "basal thrust" which is either located at the contact between a mafic volcanics sequence and a mafic intrusive or between a mafic intrusive and a felsic intrusive.

This "basal thrust" strikes northeast to north-northeast and dips gently to the south (about 30°S). Regional schistosity varies in strike from north-south to north 70° with gentle to intermediate/steep dips to the east and south (25°-65°).



ENDURANCE GOLD CORP

RELIANCE GOLD PROJECT, GOLD BRIDGE, BC – AN "EPIZONAL" OROGENIC DISCOVERY.

Robert T. Boyd, CEO, Endurance Gold Corp. and Darren O'Brien, Senior Consultant, Endurance Gold Corp.

The Reliance Project BC is located 10 km from the Bralorne-Pioneer Mine a former 4 million ounce gold producer. Reliance represents an unexplored orogenic gold system associated with 50 to 200 m wide Fe-carbonate (ankerite) altered and sheared mafic volcanic & sediment package within a regional-scale reverse fault complex. Exploration along the Reliance trend has identified excellent gold values in soil, talus fines, channel samples and drilling indicating a strong mineralized system over at least 1.2 km. The gold system remains open to expansion along the NW-SE structural trend. Reliance is similar age and genesis to Bralorne (65 Ma) and postulated to be an "Epizonal" orogenic equivalent of Bralorne. Reliance could represent the shallow exposure of another major orogenic gold camp subparallel to the Bralorne-Pioneer camp.

Recent drilling was completed under outcrops identified by channel sampling in 2020 of 5.89 gpt Au over 31.5 m (includes 9.69 gpt Au over 9.1 m); 6.92 gpt Au over 13.4 m (includes 8.97 gpt Au over 9.6 m); and 4.88 gpt Au over 23.5 m (includes 8.6 gpt Au over 9.1 m) with elevated antimony. Compressed air-assisted reverse circulation (RC) drilling tested shallow extensions of these oxidized and weathered outcrops. Drilling finished in December 2020 and as of December 6, 17 RC holes have been drilled with a total meterage of 978 m. Assays for the 2020 drilling are not expected until January 2021 ahead of the conference. A 2008 drilling campaign returned values such as 13.30 gpt Au over 4.20 m; 7.05 gpt Au over 12.05m; and 5.43 gpt Au over 15.35 m. Polished drill core intervals selected from the 2008 drilling for display include 12.2 gpt Au over 2.65 m, 15.4 gpt Au over 1.0m and 19.5 gpt Au over 1.16 m.



ENDURO METALS: EXPLORING THE HEART OF THE GOLDEN TRIANGLE

Dylan Hunko, VP Exploration, HEG & Associates Exploration Services Inc.

Enduro Metals is one of the leading exploration companies focused in the heart of British Columbia's prolific Golden at its Newmont Lake Property. Building on prior results, the company's geological team made several significant discoveries during its initial exploration programs in 2019 and 2020.

Enduro Metals has outlined four distinct mineral systems on the Newmont Lake project. Each one of these mineral systems has unique characteristics, defining them by deposit type and metal endowment.

The McLymont Gold Corridor in defined by high grade Gold-Silver-Copper Epithermal Veins and Skarns that are directly related to the deep crustal structure known as the McLymont Fault. Drilling highlights from here include: (NW20-09) 8.85 m of 31.09 g/t gold and 1.07% copper, (NW19-12) 44.13 m of 4.03 g/t gold and 0.29% copper, and (R-08-07) 144 m of 3.18 g/t gold.

The Ridge Zone is characterized by Copper-Gold Alkalic Porphyry and related Skarn systems. The Ridge Zone has striking similarities to large-scale deposits in the region like Galore Creek. Limited drilling to date has returned: (STDDH19-006) 56.35 m of 0.45% copper, 0.33 g/t gold and 3.44 g/t silver. A surface-channel sample at the Ridge Zone known as Green Rock returned: 22 m of 2.00% copper, 2.27 g/t gold, 34.36 g/t silver and 4.69% zinc. Green Rock has never been drill-tested.

The CUBA system is outlined by a large 6km Silver in soil anomaly described as a combination of epithermal veins and carbonate replacement style systems. Surface chip samples from CUBA has returned values of: 2.4 m of 1071 g/t silver, 9.30% zinc and 2.00% lead, and 4.8 m of 728 g/t silver, 7.70% zinc and 6.20% lead.

Chachi, a newly discovered area, generated high-grade samples of gold, silver, lead, zinc, nickel and cobalt over a 9km x 4km area with associated induced polarization anomalies.



FIREWEED ZINC LTD.

INNOVATION AND EXPLORATION LEADS TO NEW DISCOVERY AT THE BOUNDARY ZONE

Gilles Dessureau, V.P. Exploration; Moira Cruickshanks, Senior Geologist and Jack Milton, Chief Geologist Fireweed Zinc Ltd.

Fireweed Zinc's Nidd property in Yukon Territory, Canada is part of the Macmillan Pass Project, which also covers the Tom and Jason shale-hosted, zinc-lead-silver deposits that have current Mineral Resources and a PEA economic study (11.21 Mt Indicated 6.59% Zn, 2.48% Pb, 21.33 g/t Ag, and 39.47 Mt Inferred 5.84% Zn, 3.14% Pb, 38.15 g/t Ag (see Fireweed news release January 10, 2018 for information and QP statement)).

The property covers the Boundary Zone, which consists of a central core area (approximately 200x800 m) of significant vein-hosted, stockwork, disseminated, and replacement-style zinc mineralization within a larger hydrothermal system over 2 km in strike length. Mineralization is dominantly sphalerite-siderite-pyrite with minor galena deeper in the system and occurs from surface up to 285 m down-dip.

In 2019, Fireweed drilled two holes in the central core area of the Boundary Zone and intersected extensive zinc mineralization, including several zones of high-grade, vein-, breccia-, and stockwork-hosted zinc mineralization and wide zones of breccia-hosted and replacement-style zinc mineralization. NB19-001 intersected 250 m of 3.44% Zn, 0.10% Pb, and 5.6 g/t Ag, including 23.3 m of 16.35% Zn and 4.85 m of 31.9% Zn.

In 2020, Fireweed drilled nine diamond drill holes (2,314 m) on the property and intersected several new zones of mineralization. Drill hole NB20-004 was drilled 200 m west of previously known mineralization and intersected significant new mineralization (now called Boundary West) south of a fault zone separating it from the central core area. Drill hole NB20-009, drilled approximately 300 m west of the central core area, intersected two distinct stratiform zinc systems at Boundary West: an upper, mid-late Devonian sequence and a lower, Late Ordovician-Early Silurian sequence. These stratiform systems are overprinted by wide intervals of vein-hosted mineralization. The discovery of zinc mineralization in the lower, older sequence and presence of wide intervals of vein mineralization greatly expands the area and stratigraphic range of discovery potential.

All samples have been submitted to the labs and assays are pending.

GENERATION MINING

MARATHON PALLADIUM DEPOSIT: THE LARGEST UNDEVELOPED PALLADIUM DEPOSIT IN NORTH AMERICA

John McBride, Matt Pitts and Chanelle Boucher, Generation PGM Inc.

The Marathon Palladium Deposit, as well as the Geordie and Sally satellite deposits, is located within the Mesoproterozoic Coldwell Complex in the Superior Mid-continent rift of North America. The conduit style Marathon Palladium Deposit exhibits exceptional grades and is considered to be an example of extreme Platinum Group Element (PGE) enrichment ranking it among the World's highest-grade localities of PGE in disseminated sulfides.

The Marathon Palladium deposit contains a Measured and Indicated Mineral Resource of 7.13 million oz palladium equivalent (PdEq) within a 179 million tonne pit constrained deposit grading 1.24 g/t PdEq calculated at a C\$13 NSR cut-off (includes an estimated 3.24 million oz Pd, 1.06 million oz Pt and 796 million lbs Cu).

A feasibility study on the Marathon Palladium Deposit is underway and should be complete during the first quarter of 2021. The project is also the subject of an Environmental Assessment (EA) review and approval process that was restarted in November 2020.

PGE and copper mineralization occur along the margin of the Complex hosted in mafic to ultramafic rocks of the Marathon Series. Mineralization consists of varying proportions of disseminated chalcopyrite, pyrrhotite, bornite and pentlandite and associated PGEs. Highly enriched PGEs are found in the W-Horizon zone which makes up approximately 14% of the deposit.

A 5000 m program was completed in 2020 to test for the down dip western extension of the high-grade W-Horizon of the Marathon deposit. The area tested is believed to be the main feeder conduit for the Marathon Deposit and is parallel to a major east-west fault structure. The program completed 12 drillholes and include intersections of W-Horizon, Main zone and semi-massive sulfide mineralization.



GR SILVER MINING LTD.

THE PLOMOSAS AND SAN MARCIAL PROJECTS – EMERGING SILVER-GOLD RESOURCES IN THE ROSARIO MINING DISTRICT, SINALOA, MEXICO

Marcio Fonseca, President and CEO, and Trevor Woolfe, VP Corporate Development and Exploration, GR Silver Mining Ltd.

GR Silver Mining Ltd. aims to develop a significant new silver-gold production centre incorporating its Plomosas Silver Project and the adjacent San Marcial Project, located in the historic Rosario Mining District, on the western edge of the Sierra Madre Occidental, Sinaloa, Mexico.

In March 2020, the Company acquired the Plomosas Silver Project from First Majestic Corp. It is fully permitted with key infrastructure in place and includes a historical shallow underground mine, operated by Grupo Mexico until 2001. Grupo Mexico's focus was lead and zinc extraction and recent drill hole results are confirming silver and gold potential on the 8515 ha property, including 563 historical drill holes. A 12 000 metre surface and underground resource/exploration drilling program is in progress. The geological setting is defined by an erosional window into the regional geology, exposing andesite and andesitic tuffs, rhyodacites and dacites, with associated volcanic breccias and lapilli tuffs below a thick sequence of silicic ignimbrites. The precious and base metal mineralization is defined by a series of N-S structural corridors, hosting high-grade Pb-Zn-Ag-Au in hydrothermal breccias, (ii) low sulfidation epithermal veins containing high-grade Ag-Au, and (iii) large volume, disseminated to massive polymetallic (Cu-Zn-Pb-Ag-Au) sulfide mineralization.

In February 2019, GR Silver released its maiden NI 43-101 resource estimate for San Marcial, containing 29 million ounces Ag (Indicated) and 10 million ounces Ag (Inferred). The San Marcial resource is hosted in a structural zone and hosted mainly by a 500 m-long Ag-rich hydrothermal breccia. Our recent exploration program, including a detailed lithogeochemistry program has unveiled disseminated sulfide mineralization on the footwall of the resource area and high-grade gold mineralization supporting presence of a much larger mineralized epithermal system.

GREAT BEAR RESOURCES

GREAT BEAR RESOURCES: CONTINUED SUCCESS AT FINDING HIGH GRADE GOLD ON THE DIXIE PROJECT

R. Bob Singh, Vice President Exploration; James Irwin, Exploration Geologist; Carly Smythe, Exploration Geologist, Great Bear Resources Ltd.

Great Bear Resources will provide drill core from two high grade gold zones from the Dixie property, the "Hinge Zone" and "LP Fault Zone". Discovery holes for GBR in the Hinge Zone include DHZ-003 and DHZ-004, drilled in August of 2018. Results were 51.39 g/t gold over 5.05 metres (DHZ-003) and 68.76 g/t gold over 5.80 metres (DHZ-004) with gold hosted in quartz veins in a mafic volcanic/basaltic rock package. The Hinge Zone hosts the highest-grade results to date on the property, 1602.73 g/t gold over 0.60 metres in DHZ-014, drilled in January of 2019.

The LP Fault is an 18 kilometre long deformation zone. Gold is located along foliation surfaces and in broken and transposed quartz veins, hosted in a felsic volcanic package that has undergone varying degrees of silica, albite, and sericite alteration. Discovery for this zone was in the spring of 2019 with DNW-011, which assayed 12.33 g/t gold over 14 metres including 30.90 g/t gold over 4.60 metres and 130.97 g/t gold over 0.60 metres. Drilling is currently focussed on the LP Fault where GBR has drill tested and identified gold mineralization and similar geology for over 4.0 km along strike in the zone. Typically, observed gold results are a high-grade mineralized core with a low-grade gold halo. 2020 results include 2.67 g/t gold over 104.15 metres, including 18.57 g/t gold over 13.0 metres in BR-118, drilled approximately 2 km away from DNW-011.

Great Bear's Dixie Project is an early-stage exploration project located 25 km southeast of Red Lake, Ontario and a 30-minute drive from the Red Lake gold mine operated by Evolution Mining. Gold mineralization on the property was discovered in the 1940s and was drilled by several companies until it was acquired by GBR in 2017. Drilling is ongoing.



HIGHGOLD MINING

EXPLORING THE POTENTIAL OF THE HIGH-GRADE GOLD-ZINC (COPPER) JOHNSON TRACT DEPOSIT, ALASKA

Nathan Steeves, Chief Exploration Geologist, HighGold Mining Inc; Brodie Sutherland, Project Manager, HighGold Mining Inc.

The high-grade gold-zinc (copper) JT Deposit is an advanced stage exploration target within the Johnson Tract, located 20 km from tidewater and 200 km southwest of Anchorage. HighGold acquired the 8475-hectare Johnson Tract in 2019 through a lease agreement with CIRI, an Alaska Native Regional Corporation and one of the largest private landowners within the Cook Inlet region. The area was last explored in the mid-1990s and includes at least nine other high-potential mineral prospects over a 12 km strike length.

Mineralization at the JT Deposit occurs primarily as crustiform, cockade, to massive quartz-sulfide \pm chlorite \pm anhydrite veins and vein breccia in dacitic to andesitic volcanic and volcaniclastic rocks of the Jurassic Talkeetna Formation. The JT Deposit hosts an Indicated Resource of 2.14 Mt grading 10.93 g/t gold equivalent ("AuEq") comprised of 6.07 g/t Au, 5.8 g/t Ag, 0.57% Cu, 0.80% Pb and 5.85% Zn.

High-grade polymetallic vein- and breccia-style mineralization outcrops at several key targets elsewhere on the property, including at the DC, Easy Creek, and Kona targets. Historic drilling in the early 1980s at the DC prospect intersected up to 36.6 m of 3.57 g/t Au, 1.8% Zn, 0.2% Cu, 0.4% Pb and 15.5 g/t Ag. Retreat of ice and snow at DC has also exposed unsampled veins south of the previously worked showings.

The 2020 field program included over 16 000 m of diamond drilling at and around the JT Deposit, 23-line km of DCIP geophysical survey over the Kona and DC prospects, and an expansive surface mapping and prospecting program that included 600 rock and chip and 1200 soil samples. Drilling results to date from the JT Deposit have upgraded the known resource, expanded it down plunge at depth, and outlined the discovery of a new copper-rich footwall zone.



DELAMAR PROJECT, IDAHO: RE-AWAKENING A GIANT – AN UPDATE

E. Max Baker, Integra Resources Corp.

The DeLamar project in southwestern Idaho is approximately 100 miles south of Boise. The historical underground mines at DeLamar and Florida Mountain started operating during 1889 and ceased in 1914 due to World War One. Mining focused on the high-grade gold-silver epithermal veins within the basement granitic rocks. The lower grade halo mineralization, which capped the epithermal veins, was mined by open pit from 1977 until 1998, when operations ceased due to low precious metal prices. In total, more than 1.6 million ounces of gold and 100 million ounces of silver have been produced to date.

Integra Resources acquired the two properties in late 2017. By late 2019, an updated mineral resource estimate and preliminary economic assessment had been completed by Integra, based primarily on 2912 historical drillholes (311 951 m) with additional confirmation drilling. The current resource stands at 3.9 million gold-equivalent ounces (Ag:Au 77:1) measured and indicated and 0.5 million gold-equivalent ounces inferred.

To date, Integra has drilled more than 200 drill holes (57 000 m) and has expanded the land holdings to approximately 20 000 acres of patented and unpatented claims and a further 7 800 acres of leased lands. In addition, Integra has completed an in-house structural analysis; conducted a regional aeromagnetic survey; collected 8500 soil and 1500 rock-chip samples; conducted more than 80-line km of induced polarization and airborne magnetic surveys; and completed geological mapping. Exploration targets resulting from this work include high-grade veins at Florida Mountain and War Eagle, potentially large extensions to the existing sulfide resources at Florida Mountain and DeLamar and grassroots high-grade vein targets in the Black Sheep district.

Mineralization at Black Sheep comprises extensive areas of sinter and opaline silica cut by high-level epithermal veining and brecciation.

K92 MINING



JUDD VEIN SYSTEM, KAINANTU GOLD MINE, EASTERN HIGHLANDS PROVINCE, PAPUA NEW GUINEA

Chris Muller, VP Exploration; Andrew Kohler, Mine Geology Manager and Mine Exploration Manager; David Medilek, VP Business Development and Investor Relations, K92 Mining Inc.

The Judd Vein System is located in the eastern Papua Mobile Belt of mainland Papua New Guinea and is part of K92's Kainantu Gold Mine. The Papuan Mobile Belt hosts a number of world class epithermal Au (e.g., Porgera) and porphyry Cu/Au (e.g, Ok Tedi, Frieda River, Wafi/Golpu) ore bodies. The Judd Vein System has a known strike length of over 2.5 km, seen limited historical exploration and consists of four known veins based on limited surface and underground drilling to date. The best analogue to the system is K92's producing Kora Gold-Copper Deposit which runs subparallel over the 2.5 km strike length and is located ~150-200 m to the west. Kora is classified as an intrusion-related intermediate sulfidation quartz-sulfide gold-copper vein system, with an average vein thickness of 3 – 5m. Kora has a total measured and indicated resource of 1.1 million ounces at 10.4 g/t gold equivalent ("AuEq") and inferred resource of 3.7 million ounces AuEq at 9.0 g/t AuEq (effective date April 2, 2020) over approximately 1 km of drilled strike.

Since K92 acquired Kainantu in 2015 and restarted operations in 2016, there has been very limited exploration conducted on the Judd vein system until very recently. During the second quarter of 2020, K92 opportunistically developed a return airway ventilation infrastructure drive along the Judd Vein #1 ("J1 Vein") that was near mine infrastructure. The results were significant, initially encountering 109 metres of similar mineralization to Kora at an average vein width of 3.4 metres at 5.5 g/t AuEq or 3.6 g/t Au, 19 g/t Ag and 1.11% Cu. As a result, K92 allocated two underground drill rigs to commence exploration on Judd and on November 9, 2020 announced the results from the first four holes which included: hole JDD0006 recording 7.25m at 256.09 g/t Au, 113 g/t Ag and 0.42% Cu (258.01 g/t AuEq, 5.30m true width) and hole JDD0003 recording 4.52m at 10.81 g/t Au, 53 g/t Ag and 7.35 % Cu (22.40 g/t AuEq, 2.81m true width). Hole JDD0006 is one of the highest-grade holes ever drilled by K92 at the Kainantu Gold Mine.

On November 24, 2020, K92 announced the results from additional development, extending the drive by 114 metres to the south, which encountered a significant increase in grades along the J1 Vein, averaging 13.57 g/t AuEq or 12.17 g/t Au, 0.79% Cu and 19 g/t Ag over an average width of 3.7 metres. The most southerly face reported a vein width of 5.46 metres at 109.54 g/t AuEq or 108.0 g/t Au, 0.27% Cu and 100 g/t Ag. K92 also reported the results of processing a J1 Vein bulk sample, delivering solid recoveries of 88.8% for gold, 97.5% for copper and 88.2% for silver and a positive grade reconciliation. The Judd vein system is open up dip, to depth and along strike in both directions. The exploration results to date are very promising and Judd has the potential to provide another base load for the Stage 3 production expansion which is being evaluated.

λΜΕ ROUNDUP.

KENORLAND MINERALS

THE REGNAULT DISCOVERY - A NEW HIGH-GRADE GOLD SYSTEM IN THE FROTET-EVANS GREENSTONE BELT

Francis MacDonald, Kenorland Minerals

The recently discovered, high-grade, Regnault gold system is located in the Frotet-Evans belt of Northern Quebec, Canada, approximately 40 km south of the approximately 5 million ounce Troilus gold-copper deposit. After two passes of regional exploration, Kenorland Minerals completed an initial drill program during March 2020, during which the new, Regnault gold system was discovered. The best drill intersection from the initial drill program returned 29.08 m at 8.47 g/t gold. Multiple gold-bearing structures were also discovered over a strike length of approximately 2 km. This presentation will outline the exploration and targeting methods that lead to the new, blind discovery of a previously unknown, high-grade gold system.



KODIAK COPPER CORP.

THE MPD PROJECT: GATE ZONE – A SIGNIFICANT NEW COPPER-GOLD PORPHYRY DISCOVERY IN SOUTHERN BC.

Jeff Ward and Andrew Berry, Kodiak Copper Corp.

The MPD Project (MPD) is located in south-central British Columbia, 40 km south of Merritt and 25 km north of Princeton. Kodiak Copper Corp. (Kodiak) acquired the 9733 ha property in late 2018 as a single land package which consolidated three historic prospect areas (Man, Prime, Dillard) for the first time.

The MPD Project lies within the southern portion of the geological Quesnel Terrane, British Columbia's primary copper-producing belt that hosts nearby mines such as Highland Valley Copper, New Afton and Copper Mountain. Upper Triassic to Lower Jurassic age alkalic to calc-alkalic volcanoclastic and intrusive rocks of the Nicola Group underlie most of the property (Preto, 1979). Copper-gold mineralization at MPD is hosted by variably to intensely altered porphyritic diorite, associated breccia and phyric volcanic rocks.

Kodiak reported results from its maiden 2019 drilling in early 2020. The new Gate Zone was discovered with nearvertical hole MPD-19-003 which assayed 0.53% Cu and 0.16 g/t Au over 102 m, within a broader Cu-Au zone extending from near surface to 800 m depth. The Gate Zone is situated at the north end of a large, untested historic copper-in-soil anomaly, having over one km of strike length.

Follow-up angled drilling in 2020 returned higher grades at Gate of 0.70% Cu and 0.49 g/t Au over 282 m, from 263 to 545 m in hole MPD-20-004, within a mineralized envelope of 0.49% Cu and 0.29 g/t Au over 535 m width, between 202 and 737 m downhole.

Gate Zone results to date highlight a broad zone of porphyry copper-gold mineralization (pyrite + chalcopyrite +/bornite) estimated at least 300 m wide (east-west) and extending down to 800 m vertical depth, which remains open to extension.

Kodiak completed nine holes totaling 6,698 m during the 2020 drill program, four of which have been reported to date. Kodiak is fully funded for the 2021 program and drilling will continue in early 2021.



KORE MINING

THE FG GOLD PROJECT, CARIBOO REGION, BRITISH COLUMBIA, CANADA

Michael J. Tucker (P.Geo), Vice President Exploration; Scott Trebilcock, President and CEO: James Hynes, Executive Chairman, Kore Mining Ltd.

The Frasergold deposit (FG Gold Project) is located approximately 100 km east of Williams Lake within the Quesnel terrane of British Columbia. The deposit is hosted dominantly within Middle-Upper Triassic Nicola Group black ("knotted") phyllite. These rocks form the northeast limb of the northwesterly trending Eureka Syncline, which is situated just to the SW of the terrane bounding Eureka thrust. The deposit is considered to be an orogenic related, quartz-carbonate-gold vein system. The FG Gold project currently hosts a measured and indicated resource completed in 2015 (0.5 g/t Au cutoff) of 376 000 ounces of gold, at an average grade of 0.776 g/t Au and an additional 634 900 inferred ounces at an average grade of 0.718 g/t Au.

Renewed exploration on the FG Gold project in 2020 by KORE Mining continues to expand on zones of known gold mineralization, while exploring for deeper, down-dip extensions of higher-grade plunge lines.

2020 drill highlights include:

- FG-20-369 0.9 g/t Au over 211 m
- FG-20-372 1.0 g/t Au over 98 m
- FG-20-373 10 g/t Au over 11 m
- FG-20-377 3.22 g/t Au over 31.35 m

Historical drilling was largely restricted to the top 100 m of the deposit area. Drilling in 2020 by KORE is focused on extending the plunge of higher-grade sections down dip and along strike from historical extents. So far, KORE has successfully extended mineralized zones 330 m down-dip from the extent of historic drilling (hole FG-20-377). Exploration efforts will continue to unravel the complex structural controls on gold mineralization with the goal to apply a new exploration model to the approximately 4.6 km of mineralized strike extent of the FG Gold project.



LIBERTY GOLD CORP.

BLACK PINE: A MULTIPLE KM-SCALE, OXIDIZED, CARLIN-STYLE GOLD SYSTEM IN SOUTHEASTERN IDAHO

Moira Smith, VP Exploration; William Lepore, Principal Geologist; Peter Shabestari, VP Operations; Randy Hannink, Black Pine Project Manager; April Barrios, Senior Geologist, Liberty Gold Corp.

Liberty Gold's Black Pine Gold Oxide Project is located along the northeastern edge of the Great Basin in southeastern Idaho. Approximately 465 000 ounces of gold were produced from five small pits over a 7 square kilometer area in a run-of-mine heap-leach operation in the 1990s. Liberty Gold acquired the property in 2016. Prior to the commencement of drilling in 2019, Liberty Gold undertook detailed compilation and modeling of over 1800 historic drill holes and 10 000 surface samples. Exploration is leveraged by the presence of extensive gold mineralization documented in historic drill holes and surface samples.

Sedimentary rock-hosted gold mineralization is hosted in Pennsylvanian to Permian Oquirrh Group limestone, dolostone, calcareous siltstone and sandstone, which underwent extensive structural preparation through Sevier-age (late Cretaceous) folding and thrusting, as well as Early Cenozoic normal faulting. Prospective gold-bearing strata form a thrust imbricated sheet ranging from 100 to over 300 m thick. Gold-bearing fluids were introduced into these receptive strata along low- to high-angle normal faults. Gold mineralization is accompanied by elevated arsenic, antimony, thallium, mercury and barium, as is typical of Carlin-style systems in the Carlin Trend. Alteration includes jasperoidization, decalcification, clay alteration, calcite veining and iron oxides.

Liberty Gold has drilled 260 holes to date, including 15 PQ core holes for metallurgical and other studies, which have produced a number of impressive intercepts, including 44.2 m grading 3.14 g/t gold in LBP062 and 53.3 metres grading 4.39 g/t gold in LBP043. Weighted average cyanide-soluble assays for these intervals average >90% of the fire assay. A recent, 29 composite variability column testing program produced a weighted average 82% gold extraction.

Liberty Gold believes that the historical data and current drilling support the thesis that a shallow, oxidized, multimillion ounce Carlin-type gold system exists at Black Pine.



MAWSON GOLD ADDS ANOTHER HIGH-GRADE GOLD SYSTEM TO ITS PORTFOLIO: SUNDAY CREEK, VICTORIA, AUSTRALIA

Nick Cook and Michael Hudson, Mawson Gold Limited

Mawson owns or is joint venturing into three high-grade, historic shallow orogenic goldfields covering 470 square km in Victoria, Australia and is well placed to add to its already significant gold-cobalt inferred resource in Finland.

Two distinct sub-types of orogenic gold mineralization have formed in Victoria, during metallogenic events at approximately 445 Ma and 370-380 Ma. Examples of the earlier events include the famous lode gold systems at Bendigo and Ballarat. The Fosterville high-grade mine however, is a spectacular example of the shallow-formed younger event that has rewritten Victorian gold exploration.

Drill results from Mawson's 100%-owned Sunday Creek gold project is providing more evidence of a widespread multi-event, shallow-formed gold-rich system with similar characteristics to Fosterville. Historic gold mines occur over an 11 km trend where prior drilling has tested only 800 m of this trend to an average of 80 m depth.

Mineralization at Sunday Creek is hosted in late-Silurian to early-Devonian-aged shales and siltstones containing a series of dykes of felsic-intermediate composition. Gold is concentrated in brittle structures and dominated by two styles: veins dominated by quartz-stibnite±arsenopyrite, and a broader zone of brittle-fault/shear hosted pyritic mineralization with more chaotic veining and brecciation. High grade quartz-stibnite veins were the focus of historical mining at Sunday Creek, while the broader fault-hosted systems appear untouched.

A combined structural-geochemical interpretation from oriented core from Mawson's initial drilling at Sunday Creek indicates mineralization is dominated by a NNW-SSE trend with a subsidiary low angle ("flat") set. The host sedimentary package has dips averaging 45 degrees to the NE, but small-scale folds and disruption by faults is locally important. It is clear however that more than one gold generating event has operated at Sunday Creek with visible gold evident in late fractures cutting quartz-stibnite veins, significantly improving gold grades.



MINAURUM GOLD

ALAMOS SILVER PROJECT: A HISTORICAL MINING DISTRICT CONTINUES TO REVEAL ITS SECRETS VIA MODERN EXPLORATION

Steve Maynard, VP Exploration, Minaurum Gold Inc.

Minaurum Gold's 37 317-ha Alamos project in Sonora, Mexico, covers the Alamos mining district, which produced a minimum 120 million ounces of silver from 1680 until 1930. No systematic modern exploration was conducted in the district until Minaurum's entry in 2016.

Minaurum has documented 26 vein zones with a strike length ranging from 0.5 km to 3.4 km, a cumulative strike length of 34 km over a defined mineralized footprint measuring 11 km in strike length and 6 km wide. Minaurum has completed 18 810 m of drilling in its Phase I program with a Phase II – 20 000 m drill program currently underway.

The Phase I drill program discovery hole AL17-007 at the Europa-Guadalupe zone intersected 8.25 m grading 1760 g/t Ag, 1.6% Cu, 1.5% Pb, and 2.6% Zn, incl. 2.2 m grading 5,098 g/t Ag, 2.76% Cu, 0.5% Pb and 1.18% Zn (TW 90%). At Promontorio, Hole AL19-025 intersected 3.80 m of 415 g/t Ag, 2.68 g/t Au, 1.37% Cu, 6.20% Pb and 9.19% Zn including 0.95 m of 1,566 g/t Ag, 6.72 g/t Au, 4.48% Cu, 9.27% Pb and 10.08% Zn.

The Phase II drill program will follow-up 24 targets grouped into 3 tiers on 75-100 m step-outs. High grade mineralization continues at Europa-Guadalupe intersecting 3.50 m of 404 g/t Ag, 0.54% Cu, 1.30% Pb and 1.81% Zn (AL20-042), including 1.15 m of 999 g/t Ag, 1.29% Cu, 2.98% Pb and 2.98% Zn (TW 80-90%). The Promontorio target intersected 5.1 m of 769 g/t Ag, 0.76% Cu incl. 3.1 m of 1,197 g/t Ag and 1.38% Cu (AL20-046) (TW 70-90%).

The Alamos vein system is a set of NNE-SSW-trending horsts and grabens cutting limestone, batholithic granodiorite, and andesitic and rhyolitic volcanics. Silver and base metal-bearing epithermal veins are controlled by graben-bounding faults. Additionally, "blind" veins may be present in down-dropped blocks with little or no surface expression. The "Piano-Key Model" refers to this series of parallel elongated fault blocks that are alternately up-and down-thrown. Veins in and on the margins of the high-standing blocks were eroded to expose mineralization. Mineralized levels in veins in the down-thrown blocks were protected from erosion so that only high-level stringer veins are exposed. Stringer veins on surface in down-thrown blocks potentially indicate intact economic veins at depth.

Minaurum will show mineralized core and surface samples from the Phase II program at the Alamos project.

NEW FOUND GOLD

QUEENSWAY PROJECT: DISTRICT SCALE GOLD EXPLORATION IN CENTRAL NEWFOUNDLAND

Greg Matheson, New Found Gold Corp

The Queensway Project is a district scale gold exploration project covering over 1,500 km² of the central Newfoundland gold belt. The project includes several high-grade gold zones along a combined 8 km strike length of the sub-parallel Appleton and Joe Batts Pond fault structures. New Found Gold Corp is aggressively exploring these fault zones with its fully funded 100 000 m diamond drilling program expected to continue throughout 2021. The project area is underlain by the Davidsville Ordovician turbidite sequence bounded on each margin by two major suture zones, the Dog Bay Line and the Gander River Ultramafic Belt, formed during the closure of the lapetus Ocean over Ordovician-Silurian period. Several orogenic events in the region created extensive fault zones within the turbidite basin including the Appleton and the Joe Batts Pond fault zones which extend over 100 km within the project area. Exploration drilling by New Found Gold Corp in 2020 has led to the delineation of several higher-order structures which host several newly found high-grade gold zones. The Au-Sb association and the overall brittle nature of the gold-bearing veins in these zones indicates the Queensway project is an epizonal orogenic gold system.

NEW PACIFIC METALS

SILVER SAND PROJECT: AN EMERGING WORLD CLASS DEPOSIT

Cain Saint Merat; Gary DeSchutter, New Pacific Metals Corp

New Pacific Metals Corp.'s flagship Silver Sand Project is situated 35km NE from the historic mining centre of Potosi city within the prolific Bolivian Tin-Silver belt. The footprint of the near surface deposit currently spans 1.7km in strike, 700m in width, and ~120m in thickness with an inaugural 43-101 resource estimate consisting of Measured & Indicated tonnes of 35.39 Mt @ 137 g/t Ag for 155.86 million ounces and Inferred tonnes for 35.5 million ounces.

The Silver Sand deposit is hosted within an Andean Cordillera Cretaceous sedimentary package consisting of upperbound red silt and mudstone units of the Tarapaya Formation, which overlie intensely bleached and sericitized semi/massive, Ag-mineralized sandstones of the La Puerta Formation and underlain by unconformable Paleozoic sedimentary basement rocks. The eastern peripheral domain is characterised by Tertiary dacitic and undifferentiated sub-volcanic intrusive suites and units.

Mineralization is confined to a broad, gently up-warped NW trending anticline, that is cut by E-W trending structrures. It is characterized by a laterally extensive, vertical to moderately dipping, brittle fracture network and associated thin, but densely distributed veinlet and intermittent breccia structures.

Silver mineralogy primarily consists of freibergite, miargyrite, polybasite, and andorite including abundant accessory Ag-sulfosalts. Preliminary metallurgical test work indicates recoveries in excess of 87% for the oxide-transition and sulfide mineral zones. More advanced technical studies are underway to facilitate a Preliminary Economic Assessment to further de-risk the project's economics.

Conceptual ore paragenesis suggests a Mid-Miocene prolonged and multi-phased, magmatically driven hydrothermal system, which has considerable district wide and scalable exploration potential given both the presence of proximal historic silver workings and current mine producers.

<mark>λΜΕ</mark> ROUNDUP.

ROCKHAVEN RESOURCES LTD.

KLAZA AU-AG PROJECT: INTERMEDIATE SULPHIDATION EPITHERMAL VEIN FIELD, YUKON

Matt Turner, President & CEO, Rockhaven Resources

The Klaza Au-Ag intermediate sulfidation (IS) vein field property is 100% owned by Rockhaven Resources Ltd. and covers an area of 28 700 hectares. It is favourably located within Yukon's Mount Nansen Gold Belt (MNGB), an area with subdued topography that hosts an historical gold mine, rich placer gold deposits and key infrastructure such as road access. Rockhaven's exploration to date has included 106 000 m of diamond drilling, 24 000 m excavator trenching, extensive soil geochemical surveys, plus airborne & ground geophysical surveys.

Drilling at Klaza has documented mineralized zones and numerous subsidiary structures related to an epithermal vein field that is tagged to a porphyry system The majority of these mineralized zones are hosted within a 2.5 km long and 1.8 km wide structural corridor hosted by mid-Cretaceous granitoids.

The property hosts an indicated resources of 4.5 Mt containing 686 thousand ounces of gold and 14.071 million ounces of silver at grades of 4.8 g/t gold and 98 g/t silver and inferred resources of 5.7 Mt containing 507 thousand ounces of gold and 13.9 million ounces of silver at grades of 2.8 g/t gold and 76 g/t silver. An updated PEA, contemplating both open pit and underground mining, was completed in July 2020 and has demonstrated the excellent economic potential of the Klaza Project. At a base case gold price of US\$1450/oz gold, the Klaza project has a Post-Tax NPV_{5%} of \$378 million and an IRR of 37%. At US\$1740, the project has an exceptional value of post-tax NPV_{5%} of \$540 million and IRR of 49%.

The Klaza mineral resources lie within the northern part of the MNGB, a northwest elongated structural belt that hosts more than 30 known mineral occurrences. Gold and silver-rich veins within the MNGB dominantly occur in northwesterly trending structures. The hydrothermal system associated with mineral occurrences in the MNGB is cored by weak porphyry copper-molybdenum centres, and transitions outwards to anastomosing, sheeted veins and more distally to cohesive array of precious and base metal IS veins.

A late season exploration program consisting of two skid-mounted drill rigs that completed 6 042 m of diamond drilling in 22 holes. The drill program focused on the evaluation of targets that lie outside of the Klaza Deposit resource envelope. As of mid-December, assay results were pending. Results will be released once assays have been received, compiled and evaluated.



SCOTTIE RESOURCES CORP.

BEAM ME UP SCOTTIE - TRANSPORTING A HISTORIC DEPOSIT INTO A NEW MILLENNIUM

Thomas Mumford, VP Exploration, Scottie Resources

Mineralization at the Scottie Gold Mine property primarily consists of a series of parallel, steeply dipping, NW- to W-trending, pyrrhotite-pyrite dominant shear veins. The 100% owned Scottie Gold Mine operated from 1981 to 1985 with milled vein material averaging 16.2 g/t gold and produced 95,426 ounces of gold from just 183 147 t of mineralization. Mine production was principally from one vein (the M-zone), however numerous parallel veins were identified proximal to the mine and were set for production prior to shut-down.

Aggressive land consolidation during the past 4 years has allowed Scottie Resources to build a contiguous land package that surrounds the historic high-grade Scottie Gold Mine, consisting of a total of 8750 ha. The new land package, coupled with extreme glacial retreat that has occurred since mine operation, has allowed Scottie to test a new property scale mineralization model. This model has been substantiated by drill programs in 2019 and 2020, which indicate that the gold bearing system that hosts the historic mine extends kilometres beyond what was originally envisaged, and occurs as both high-grade veins and wide distributed zones.

The 2019 discovery of the high-grade Domino Zone – located on strike, 2 km west of the historic Scottie Gold mine – demonstrated that the mineralization in the Scottie Gold Mine property is primarily structurally controlled, extending across a major contact between andesitic and rhyolitic host rocks. Recent drilling at the Blueberry Zone has produced broad intervals of near surface, moderate to high-grade mineralization (e.g., 7.44 g/t gold over 34.78 m), presenting a compelling open pit target.



SERENGETI RESOURCES

KWANIKA / STARDUST COPPER – GOLD PROJECT: CREATING A PREMIER CU-AU DEVELOPER IN CENTRAL BRITISH COLUMBIA

David Moore and Quinn Harper, Serengeti Resources Inc.; Ian Neill and Tyler Caswell, Sun Metals Inc.

The Kwanika/Stardust project is located approximately 150 km north of Fort St. James within the Quesnel Trough of north-central British Columbia. The Kwanika deposit is a Cu-Au porphyry characterized by the presence of two major and several minor intrusive bodies of the multi-phase Hogem Batholith that intrude a succession of andesitic rocks of the Takla Volcanic Group on the east side of the Pinchi fault. Located just 7km to the northwest within the Cache Creek terrane directly west of the Pinchi Fault, the Stardust Canyon Creek deposit consists of a full suite of carbonate replacement style skarn, manto and vein mineralization located proximal to the Eocene aged Glover stock.

Discovered by Serengeti Resources in 2006, diamond drilling at Kwanika has defined two mineralised zones, the Central Zone and the South Zone. The foremost Central Zone hosts a Measured and Indicated pit and underground constrained resource of 223.6 Mt grading 0.27% copper, 0.25 g/t gold and 0.87 g/t silver, containing 1.3 billion pounds of copper and 1.8 million ounces of gold.

Sun Metals discovery of the 421 zone at Canyon Creek in 2018 and subsequent drill programs to define the zone in 2019 and 2020 have defined a new high-grade resource that when combined with the Kwanika deposit, give the potential to rescope the project with a focus on incorporating high-grade underground mineralization from Stardust with higher grade zones at Kwanika. The proposed merger of the two companies give a clear path forward for the combined project to progress.

2020 drill programs were conducted at both projects, where initial drilling results from Kwanika include 698 metres grading 0.40% Cu and 0.65 g/t Au (1.34 g/t AuEq) including 124 m of 0.70% Cu and 2.10 g/t Au (3.32 g/t AuEq) from hole K-20-198. At Stardust, delineation of the 421 Zone continued with highlight holes including DDH20-SD-464, which intersected 40.4 m grading 1.74% Cu and 1.41 g/t Au with 26.6 g/t Ag (3.10% CuEq).



SKEENA RESOURCES LIMITED

ESKAY CREEK: A UNIQUE, HIGH-GRADE GOLD-SILVER VHMS

Kelly Earle and Katie MacKenzie, Skeena Resources Limited

Situated in the Northern Cordillera of British Columbia's Golden Triangle, Skeena Resources' Eskay Creek Project is regarded as one of the highest-grade, precious metal (volcanic hosted massive sulfide (VMHS) deposits globally. Skeena's current open-pit gold-silver resource at Eskay is 2.6 million ounces at 5.9 g/t AuEq of Indicated resources and 1.4 million ounces at 3.0 g/t AuEq of Inferred resources. The deposits at Eskay Creek are regionally situated in a package of Upper Triassic to Middle Jurassic volcanic and sedimentary lithologies of the Stuhini and Hazelton groups. Precious and base metal mineralization is heterogeneously distributed throughout three well defined lithologies at Eskay Creek: i) a massive to flow-banded brecciated rhyolite package; ii) a transitional rhyolite-mudstone breccia that grades into carbonaceous laminated black mudstone; and iii) an andesitic flow and sill complex with minor interflow sediments.

Excitingly, Skeena has had recent exploration success at Eskay Creek with two new mineralized zones being discovered. The new zones, Eskay Deeps and the Water Tower Zone, are a combination of feeder structures and lower mudstone units completely outside of the current resource. Highlights include 12.96 g/t AuEq over 14.50 metres in the Water Tower Zone and 15.53 g/t AuEq over 3.18 metres in the Eskay Deeps. The evidence of mineralization in these lower mudstone units, could represent not only discordant, crosscutting epigenetic/replacement style mineralization, but also the possible presence of stacked predecessor exhalative synsedimentary mineralization events.

All historic Eskay Creek core has been destroyed so attendees will be not only be looking at photos of new mineralized zones but also some of the only core from Eskay that is around today!



VALORE METALS CORP.

PEDRA BRANCA PROJECT, STATE OF CEARÁ, BRAZIL: OWNERSHIP OF AN ENTIRE PLATINUM GROUP ELEMENTS DISTRICT

Colin M. Smith, ValOre Metals Corp.

The Pedra Branca Platinum Group Elements District ("PGE") in northeastern Brazil comprises 38,940 hectares. Five deposit areas with inferred resources span a vastly underexplored belt over 70 kilometers long. ValOre acquired 100% ownership in May 2019 and released a maiden NI 43-101 compliant inferred resource of 1 067 000 ounces 2PGE+Au (Pd+Pt+Au) in 27.2 million tonnes grading 1.22 g/t 2PGE+Au. Mineralization outcrops, making all inferred resources potentially open pittable.

The deposits are hosted in zoned sill-form ultramafic intrusions within the Paleoproterozoic mafic to ultramafic Troia Unit. Target intrusions are primarily heterogeneous peridotites and dunites which host PGE-rich chromite within intercumulus domains. Chromitite horizons up to 3 meters thick are locally present and can exceed 40 g/t 2PGE+Au.

There have been over US\$35M of historic expenditures by Anglo American Platinum and others, including 30,000 meters of drilling, extensive geochemistry, geological mapping, and high-quality airborne and ground geophysics. ValOre's new targeting methodology, incorporating 3D magnetic inversion and WorldView satellite spectral signatures diagnostic of ultramafic rocks and exposed mineralization, has proven effective in targeting extensions of existing deposits and discovering new mineralized intrusions.

The project is supported by all levels of government and the local communities. Access is excellent year-round two paved state highways transect the project, and extensive in-place infrastructure includes electricity, water, housing, office space, core storage and logging facilities, and internet.

The exploration potential of the Pedra Branca Project from both a resource expansion and greenfields perspective is highly compelling, with numerous untested property-wide PGE targets remaining in addition to confirmed deposit extensions and new discoveries. ValOre concluded its inaugural 6000-meter exploration drill program in December 2020, which included resource expansion, new discovery, and pre-resource target advancement. Metallurgical advancements are also on-going with ValOre achieving mid-90% Platsol recoveries for palladium and platinum.

VIZSLA RESOURCES

INTRODUCTION TO THE HIGH-GRADE PANUCO SILVER DISTRICT

Charles Funk, VP of Exploration; Chris Lloyd, Chief Geologist; Carlos Beltran, Exploration Manager, Vizsla Resources

The Panuco (Panuco-Copala) project is a high-grade silver and gold, intermediate sulfidation epithermal district with veins mapped over a 15km by 8 km area. The project is located in southern Sinaloa, approximately one hour east by road from the city of Mazatlán.

The Panuco project has been continually mined since the late 1500s and multiple mines and mills are currently operating within the district. Despite this long history of production, the fragmented ownership has restricted development with Vizsla Resources, in 2019, being the first company to consolidate the district under a single entity. As such, despite the advanced nature of the project it remains extremely poorly explored with no detailed property-wide geological map and only drilling into two of the major vein corridors.

Vizsla Resources has had considerable exploration success in 2020 with discoveries on the Napoleon and Corden del Oro vein corridors including spectacular results such 8078 g/t silver equivalent (1808.2 g/t silver, 66.8 g/t gold, 2.99% lead and 3.30 % zinc) over 6.0 metres in hole NP-20-07. The company is currently undertaking an aggressive exploration program at the property with five drill rigs currently completing exploration and resource stage drilling.

λΜΕ ROUNDUP.

WALLBRIDGE MINING LTD.

FENELON GOLD SYSTEM: A MAJOR NEW DISCOVERY UNDER COVER IN THE UNDEREXPLORED NORTHERN ABITIBI

Wallbridge Mining Company Limited Exploration Team

Wallbridge is advancing the exploration and development of its 100%-owned Fenelon Gold property, which is located along the Detour-Fenelon Gold Trend, an emerging gold belt in northwestern Québec. The Company is currently completing its 100 000-metre exploration drill program in 2020 and has plans for a fully-funded +150 000 m drill program, as well as the commencement of a 10 000-metre underground development program in 2021. With the acquisition of Balmoral Resources Ltd. completed in May, 2020, Wallbridge now controls the most dominant land package over 90 km strike lengths of this perspective, underexplored belt and is planning for exploration programs on several regional projects in 2021.

Recent discoveries of the Area 51, Tabasco and Cayenne zones made by Wallbridge in 2019/2020 have demonstrated the large size potential of the Fenelon Gold System and the Company is working toward a maiden resource in H2 2021. For these discoveries at Fenelon, Wallbridge's team was recently named the winner the 2020 Discovery of the Year Award by the Quebec Mineral Exploration Association.

Fenelon is interpreted as an orogenic gold system developed within and along the Jeremie Diorite near a flexure in the Sunday Lake Deformation Zone, a major east-west structure that is also the host of the Detour Lake mine, operated by Kirkland Lake Gold.

Since its discovery in early 2019, Wallbridge's drilling has traced the gold-bearing Jeremie Diorite over a strike length of approximately 1.8 km and extensions of the mineralized zones and host rocks remain virtually untested in the newly acquired ground surrounding the known Fenelon Gold System.

In the coreshack, we will be displaying typical drill core from Area 51, a gold-bearing vein network developed in the Jeremie Diorite and underlying sediments, as well as from the Tabasco-Cayenne shear zones developed along the margin of the diorite.



EMERGING GOODFISH-KIRANA GOLD PROJECT, KIRKLAND LAKE CAMP, NE ONTARIO

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Warrior Gold is a gold exploration company with a 100% interest in the Goodfish-Kirana property in the Kirkland Lake gold camp, Ontario, Canada. Hosted in the Abitibi Greenstone Belt, the Goodfish-Kirana property is 11.5 km by approximately 3 km wide (34 km²) and contains three major structural trends: i) the east-west trending Kirana Deformation Zone; ii) the northeast-trending Goodfish Trend (including the A, B and C Zones), and the Victoria Creek Deformation Zone. The Property contains numerous historical gold showings, as well as 18 historical pits and shafts.

Exploration and mining dates back to the early 1900s when high-grade gold was first discovered on the Goodfish-Kirana Property. In the 1930s, Kirana Kirkland Mine reported grades between 30 g/t and 145 g/t gold. The Goodfish patents are host to two mine shafts from the 1930s of 300 and 600 ft depth and ~1000 ft of lateral workings. Significant historical drill intersections include: i) 12.65m @ 16.97 g/t Au in hole GF90-04; ii) 0.61 m @ 234 g/t Au in hole ML96-3, and iii) 0.61 m @ 99.42 g/t Au in 1941 hole #2.

After consolidating the land package (4122 ha) and compiling previous work, the company conducted geophysical surveys to highlight structural corridors in areas of historical mineralization. Targeting work identified more than 19 prospective areas. Exploration is currently focused on the Goodfish patents, targeting the A and C Zones proximal to the Goodfish #1 shaft.

To date, Warrior has completed 7829 m in 39 diamond drill holes mostly in the A and C Zones and the Kirana Trend with all but two drill holes intersecting significant gold mineralization and visible gold. A completely new zone was discovered during their 2020 drill program called the "Val 1", a N-S structure within the A Zone, where Warrior intersected their widest intersection to date that yielded – 74m at 1.22 g/t Au (including 22.3 m at 2.65 g/t Au and 6.70 g/t Au over 7.4 m in hole GK20-028).