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ROUNDUP.



Abstract Guide

2025

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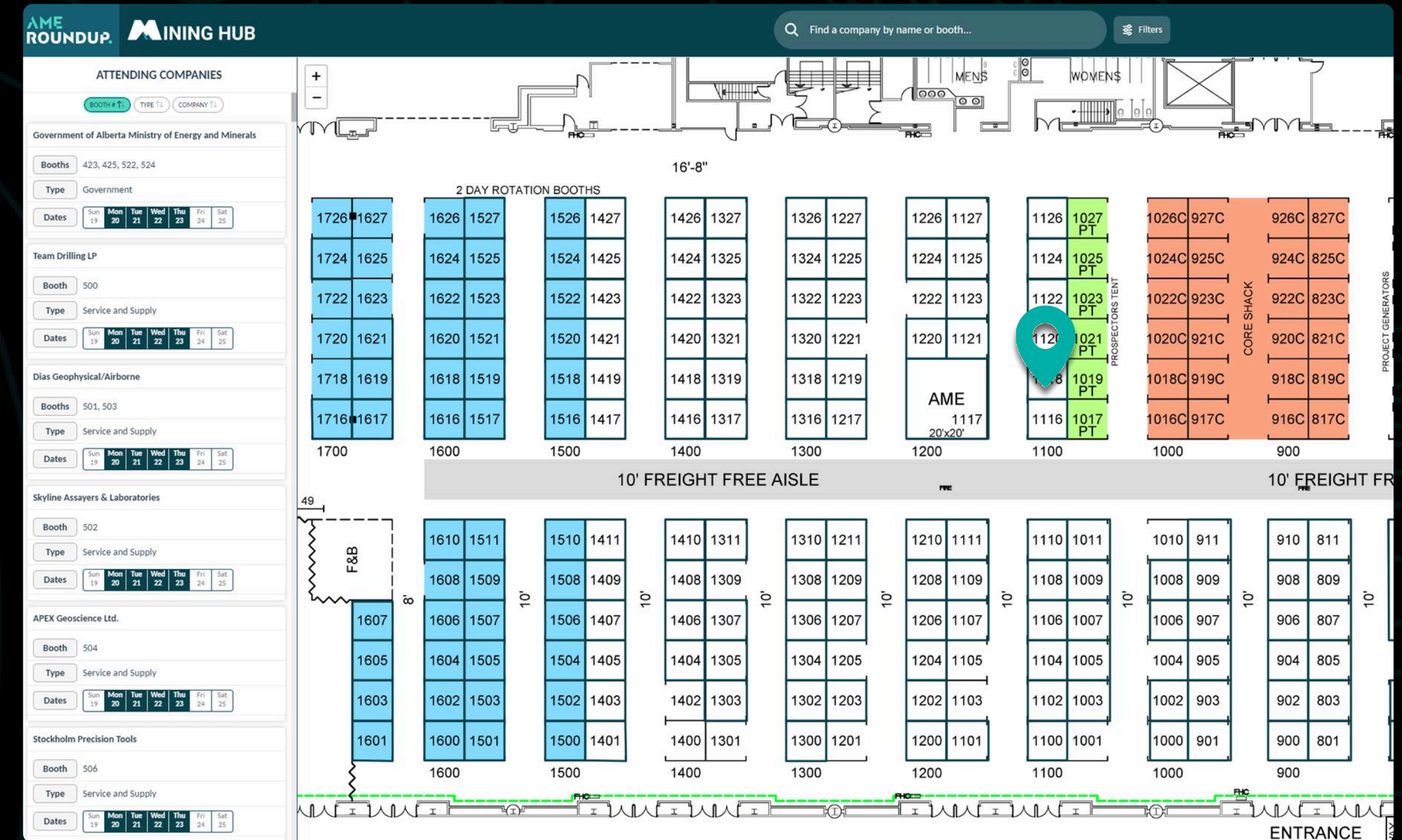
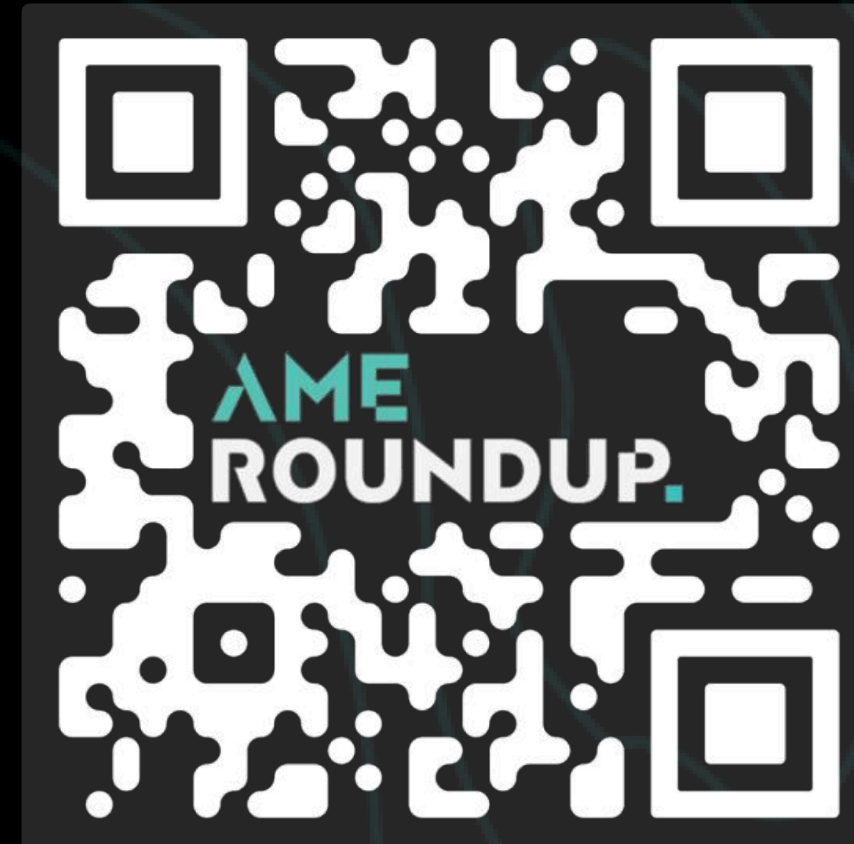
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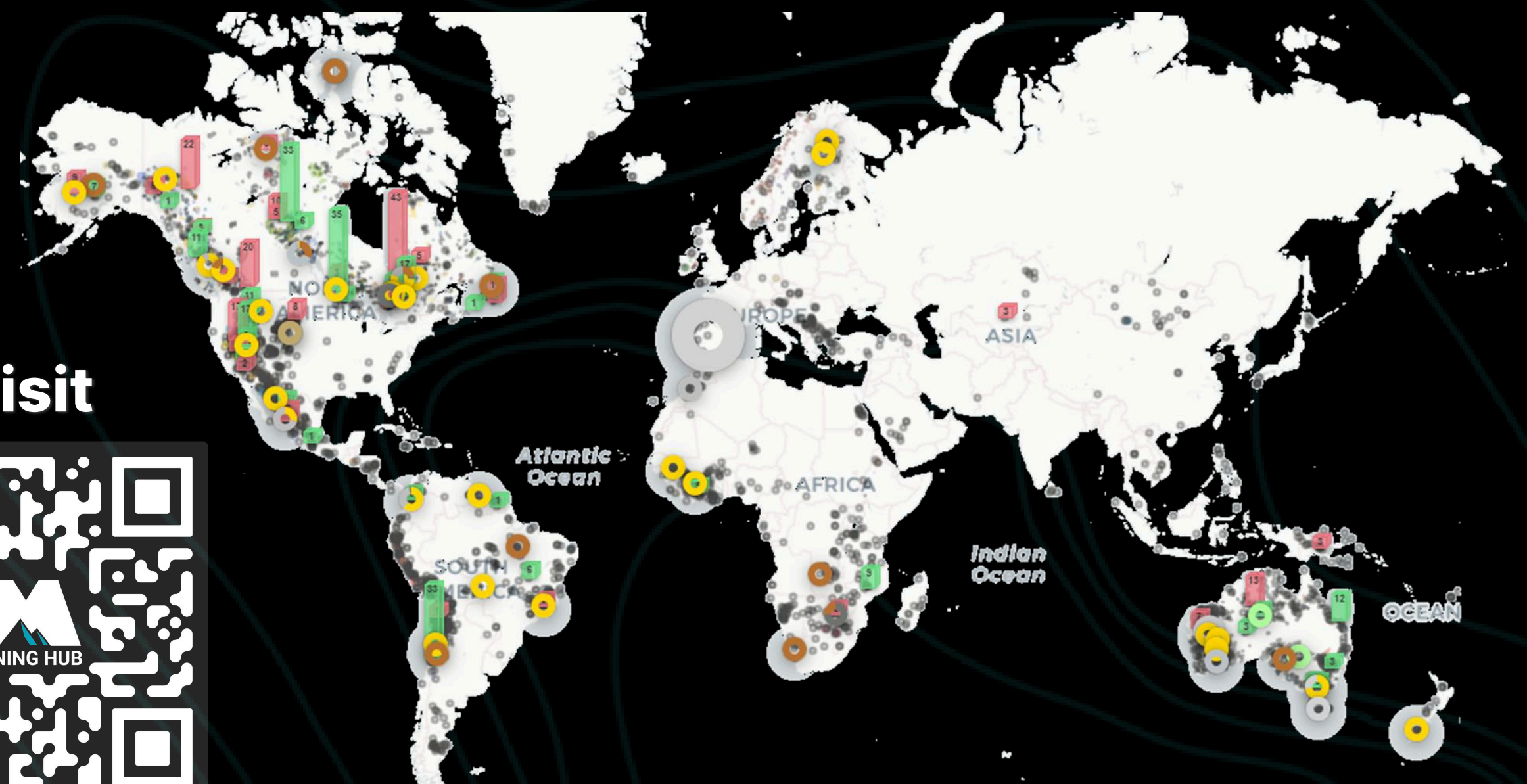


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REGIONAL OVERVIEWS

BRITISH COLUMBIA EXPLORATION AND MINING 2024

Gordon Clarke, Director, Mineral Development Office, British Columbia Ministry of Mining and Critical Minerals

Regional Overviews

10:10 AM

Mineral and coal production for 2024 continued to be a major contributor to the provincial economy. Coal typically accounts for 50-60% of the production value, copper approximately 25-30% and gold approximately 10-15%. Coal production is almost exclusively metallurgical coal.

The British Columbia Geological Survey (BCGS) tracks the progress of about 400 mineral and coal exploration projects annually. The value of exploration expenditures increased between 2019 and 2022 but have been declining since. Total expenditures in 2023 were \$643.5 million, down from \$740 million in 2022. For 2024, expenditures are expected to again decrease.

Two significant projects were in the mine development phase. Ascot Resources Ltd. paused commissioning their Premier Gold mine to refocus on mine development activities and secure additional funding for a restart. In the fall, Artemis Gold Inc. announced that construction of their Blackwater gold mine was nearly complete and planned for a late fall first gold pour.

The high profile of the provincial mining sector continued to be highlighted in 2024 by acquisitions, and investments. In July, Glencore received federal approval for the acquisition of a 77% interest in the Elk Valley Resources coal operations from Teck. Anglo American plc is planning, subject to regulatory approvals, to sell its Peace River Coal operations to Conuma Resources Limited. Strategic investments included: \$29 million by South32 Ltd. in American Eagle Gold Corp.; FPX Nickel Corp. closed a \$14.4 million investment by Sumitomo Metal Mining Canada Ltd.; Taseko Mines Limited increased ownership interest in the Gibraltar mine to 100% through the purchase of 12.5% interest from Dowa Metals and Mining Co. Ltd. and Furukawa Co. Ltd; and Moon River Moly Ltd. acquired a 25% interest in the Endako mine complex (on care and maintenance since 2014) from Sojitz Moly Resources Inc. Also, Vizsla Copper Corp. completed the acquisition of Universal Copper Ltd., Cunninham Mining Ltd. proposed to acquire American Creek Resources Ltd.'s 20% ownership of the Treaty Creek project, and Goldhaven Resources Corp., acquired Copper Peak Metals Inc.

Several projects progressed through preliminary economic assessment, prefeasibility or feasibility stages. Moon River Moly Ltd. announced a positive preliminary economic assessment for their Davidson Molybdenum project. Thesis Gold Inc. filed an updated positive preliminary economic assessment for their Lawyers-Ranch project and plan a pre-feasibility study in 2025. Permitting for projects was ongoing and progressing. The environmental assessment certificate for Seabridge Gold Inc.'s KSM project was validated for the life of the project. Blue Lagoon Resources Inc. received a draft mine permit for its Dome Mountain Gold project. Barkerville Gold Mines, owned by Osisko Development Corp., received their Mines Act permit, and their Environmental Management Act permits were referred to the statutory decision maker for their Cariboo Gold project.

Some advanced projects are expected to complete more than 30,000 m of exploration drilling in 2024. The largest drill projects target precious metals, but significant porphyry copper exploration projects are active, from grassroots through near-mine and mine expansion stages. Projects also targeted nickel, zinc, rare earth elements, tungsten, and metallurgical coal. Significant drill intersections and discoveries were reported at all stages of exploration. Reports of new discoveries and significant results continue for precious metals, base metals, and other commodities, supporting British Columbia's reputation as a premier exploration and mining jurisdiction.

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YUKON EXPLORATION AND MINING OVERVIEW 2024

Sarah Ellis, Economic Geologist, Yukon Geological Survey

Regional Overviews

10:35 AM

The Yukon saw several significant exploration results, new and updated mineral resource estimates and new discoveries in 2024. It also faced some challenges. Final numbers for exploration and development expenditures in the Yukon are pending and will be presented at Roundup; NRCan's revised spending intentions for exploration in the territory is \$165M.

Among the 2024 exploration highlights were an inaugural resource estimate for Snowline Gold's Valley deposit, and updated estimates for Banyan Gold's Powerline and Airstrip deposits. Fireweed Metals added new resource estimates for their Boundary and End Zones and updated the resource estimates at the Tom and Jason deposits. Three advanced Yukon projects - Newmont's Coffee project, BMC Minerals' Kudz Ze Kayah project and Western Copper and Gold's Casino project - continued through permitting in 2024.

In September 2024, the Yukon Supreme Court approved the first of two transactions allowing for the sale of mining facilities and assets at Minto Mine to a new Selkirk First Nation-owned company. A second transaction regarding ownership of the mining claims, mineral leases and authorizations is pending. If successful, this will be the first example of a mine owned and operated by a Yukon First Nation.

Hecla Mining brought Keno Hill up to full production in 2024. Reporting production of 2.1 Moz Ag to the end of Q3 and production guidance of 2.7 to 3.0 Moz Ag to year-end. Victoria Gold's Eagle Mine produced 29 koz of gold in the first quarter of 2024. On June 24th, the heap leach at Eagle Mine failed. A court-appointed receiver has taken control of the mine site and is overseeing remediation under the direction of Yukon government. While the long-term impacts of this failure remain unclear, remediation work is progressing, and an Independent Review Board is investigating the causes of the failure.

2024 ALASKA MINERAL INDUSTRY OVERVIEW – ROCKING THE ARCTIC

David Szumigala, Senior Minerals Geologist, Alaska Division of Geological & Geophysical Surveys

Regional Overviews

11 AM

Alaska's mineral industry had a strong performance in 2024, with a total production value around US\$4 billion. The year's highlight was the first gold pour from Kinross'/Contango Ore's Manh Choh Mine, with gold-silver ore trucked to the Fort Knox Mine facilities. Alaska's mineral industry had robust production from seven metal mines and one coal mine, a handful of projects in the development stage, and steady exploration for a diverse range of metals and commodities. Mining projects spanned Alaska, and mining was a significant contributor to Alaska's economy.

Teck's Red Dog Mine is the world's largest zinc mine and 2024 production is forecast to surpass 2023 tonnages for zinc and lead, with significant silver and germanium. Kinross's Fort Knox Mine and Northern Star Resources' Pogo Mine are forecast to produce a total of roughly 600,000 ounces of gold in 2024. Hecla's Greens Creek Mine, the U.S.'s largest silver producer, with additional zinc, lead, and gold production, is forecast to produce almost 9 million ounces of silver. Coeur's Kensington Mine forecast production of 92,000 – 106,000 ounces of gold. Usibelli Coal Mine remains a steady, 925,000 tonnes coal producer and important regional electricity producer.

ABSTRACT GUIDE 2025



Projects in the near development phase include Donlin Gold (gold), Pebble (copper, gold, silver, molybdenum), Livengood (gold), and Bokan Mountain (rare-earth-elements).

Alaska's diverse metallogenic provinces, under-explored mineral resource potential and world-class mineral deposits continue to attract exploration. Alaskan mineral exploration is expected to remain strong in 2025 and cover most regions of the state. Gold remains a focus of exploration, likely accounting for 50% of Alaskan exploration spending. Significant exploration spending for polymetallic metals associated with volcanogenic and sedimentary-hosted massive sulfide deposits is also forecast. Strong interest in critical and strategic minerals also continues. Exploration drilling programs were expected at Aktigiruaq-Anarraaq, Kensington, Greens Creek, Estelle, Golden Summit, Goodpaster, Graphite Creek, Boulder Creek, Herbert Gold, Johnson Tract, Lucky Shot, Manh Choh, Nikolai, Palmer, Flat, Treasure Creek, Whistler, Kougarok, Wiseman, and Waterpump Creek projects.

Alaska's government encourages resource development by providing geological datasets/maps, airborne geophysical surveys, and permit coordination by the Office of Project Management and Permitting (<https://dggs.alaska.gov/minerals/akgeology-info.html>).

LEVERAGING HISTORIC DATA IN THE GENERATIVE AI ERA

Stephen Pope, Technical Lead, Data and Information, Teck; Alex Harvey, Senior Managing Consultant and Jacqueline Williams, Managing Consultant & Data Scientist, IBM

Theme Session: Securing Our Future

1:40 PM

Generative AI is an emerging technology that is being harnessed in many aspects of our daily lives and is poised to transform how we explore for and mine minerals. Data is at the core of everything we do in exploration and is one of every mining company's greatest asset. Generative AI, with its capacity to summarize and create new content, offers a powerful tool for extracting key insights from historical data.

The journey to leveraging historic data is not linear and includes many steps along the path to ensure the technology can be used most effectively. A combination of industry leading geoscientific expertise, along with technology-focused knowledge, is required to optimize any generative AI solution in the exploration and mining space. Dedicated teams of geoscientists, data architects, data scientists, data engineers and project managers are critical in development and deployment of AI tools. Identifying, prioritizing and designing around user needs within an agile framework allows for accelerated development and on-the fly customization, producing meaningful functionality and capacity and delivering immediate value.

The Discovery Excellence group at Teck, in partnership with IBM, have developed a generative AI solution tailored for exploration to help access historical information in an efficient and intuitive manner. The tool offers a bimodal experience that allows users to first complete advanced searches on historic documents and secondly leverage chat functionality through Retrieval-Augmented Generation (RAG) technology.

Generative AI provides a connection between the past and the future and can play a significant role in "securing our future" leveraging historic work using new and modern tools to accelerate discovery. By embracing generative AI, the mining industry can unlock new opportunities, improve on efficiencies and ultimately contribute to a more sustainable future.

THE ECONOMICS OF DIAMOND DRILLING FOR MINERALS IN BC

Ronald Voordouw, Partner and Director Geoscience, Equity Exploration Consultants Ltd.

Theme Session: Securing Our Future

2:10 PM

The bulk of capital raised for mineral exploration is used to finance drilling operations and yet there are few, if any, published overviews on the magnitude and range of all-inclusive rates and what drives them. In this presentation, we provide real world cost ranges for the key components of such drill rates and use that to build simple cost estimate models. The model treats each component as a building block that is either essential to every drill program (e.g., drill operations, core processing, assays) or project-specific (e.g., remote camp, helicopter support, earthworks, lumber pad building). Modelled drill rates are compared to a public database of filed BC assessment work to illustrate proof-of-concept. Results indicate that in BC, all-inclusive drilling costs can range from 250 to 1,200 dollars per metre (and much higher in a few special cases) depending on where and how the drilling is done, as well as the scale of the program. We conclude the presentation with some suggestions for how to reduce all-inclusive drilling costs and the minimum capital required for exploration drilling on remote targets.

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BC'S EVOLVING MINING SECTOR: RECENT RESULTS SUPPORTING DECARBONIZATION AND CIRCULAR ECONOMY INITIATIVES

Tracy Lydiatt, Manager, Mining Innovation, Foresight Canada

Theme Session: Securing Our Future

2:35 PM

British Columbia's mining sector is undergoing a transformative shift, driven by the dual imperatives of decarbonization and a circular economy. The province, rich in critical minerals essential for green technologies, is uniquely positioned to support global efforts in reducing carbon emissions. Recent exploration and production advancements have highlighted BC's capacity to sustainably supply materials like copper, nickel, and rare earth elements vital for renewable energy, electric vehicles, and energy storage systems.

This talk will explore key findings from two recent research projects diving deeper into supporting BC's mining projects to electrify and investigate tailings and waste rock to highlight opportunities to extract further value from these mining by-products and address potential environmental liabilities as well as adopt cleantech solutions. Attendees will gain insights into the opportunities and challenges facing BC's mining sector as it evolves to meet the demands of a sustainable, low-carbon future.

CRITICAL METALS AND MINERALS: CRITICALITY, OPPORTUNITIES AND CHALLENGES

Simon M. Jowitt, Director, Ralph J. Roberts Center for Research in Economic Geology, Nevada Bureau of Mines and Geology, University of Nevada Reno

Theme Session: Securing Our Future

3:00 PM

The energy transition, the global move toward low- and zero-CO₂ energy generation, storage and transport, will require unprecedented levels of mining on top of already record levels of production as a result of the metal and mineral intensity of modern society. This is especially true of the metals and minerals considered critical as a result of supply chain insecurity. However, the specific metal and mineral needs of the energy transition and the balance of metal and mineral supply and demand are subject to significant uncertainty. These uncertainties include (but are not limited to): (1) Demand uncertainty, or uncertainties over the metal and mineral demand for energy transition and the timing of this demand, (2) Supply uncertainty, or the timing of supply changes as a result of increases or decreases in mining capacity, (3) Technology uncertainty, or uncertainty over the technologies used during the energy transition, and (4) Policy uncertainty or the negative and positive impact of policy relating to mining and critical metal and mineral supply, including changes to criticality considerations from a supply to more economic or other perspectives (e.g. Australia's assigning of critical status to nickel). These uncertainties are interlinked, and demand and supply often operate at different timescales. All of this creates the potential for short, medium and long term under- and oversupply scenarios and price volatility, putting individual projects in jeopardy and creating uncertainty over long term metal and mineral supply. This presentation will provide an overview of the uncertainties, challenges and opportunities facing the minerals industry and specific critical metals and minerals sectors, the information and data we need to consider relating to these uncertainties, and the potential impact of this uncertainty on our ability to achieve the energy transition.

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THE FUTURE OF GEOSCIENCE EDUCATION

James Scoates, Professor, University of British Columbia

Theme Session: Securing Our Future

3:25 PM

Geoscience education has undergone significant change driven primarily by applications of new pedagogical approaches, technological and analytical advancements, and profound shifts in societal priorities, especially related to the global energy system and climate change. At the same time, geoscience enrolments in Canadian universities have fluctuated strongly, linked to changes in economic cycles, employment opportunities, and student expectations, with a marked decline (nearly 50%) since the last peak in 2014. Training the next generation of geoscientists is increasingly important as their skills are critically needed to provide information that will influence key decisions on land and resource management, water policy, climate adaptation, and natural hazards. Marketing the geosciences and recruitment of potential students before they begin post-secondary education are essential given predicted increases in employment opportunities and as diversity has remained persistently low. Successful geoscience programs apply active teaching strategies based on recent pedagogical research, which indicates their effectiveness in motivating students, improving learning and retention, and developing critical thinking skills. Core geology courses, such as mineralogy, petrology, field techniques, structure, and geochemistry, can readily take advantage of rapid advances in image analysis (micron to planetary), numerical modeling of large datasets, and 3D geological modeling through direct incorporation into class activities and lab materials. Field-based learning, where students make real-time decisions while applying their emerging geological skills, will be increasingly complemented by pre- and post-visualization digital tools (GIS, immersive video, 3D models/modeling) to strengthen learning experiences. Upper-year capstone courses focused on solving complex multi-disciplinary problems can capitalize on computational and programming degree requirements and utilize the transformational capabilities of artificial intelligence and machine learning for enhanced data analysis, prediction, and decision-making in the geosciences. The next generation of highly trained geoscientists is poised to play a vital role in addressing global challenges and ensuring a sustainable future for our planet.

EVOLUTION OF CORDILLERAN CONCEPTS OVER THE LAST THREE DECADES

Maurice Colpron, Head, Bedrock Geology, Yukon Geological Survey

Advances in Geoscience

9:00 AM

The early 1990s marked a turning point in understanding of the Canadian Cordillera with publication of the comprehensive synthesis of current knowledge in Geology of Canada No. 4 – Geology of the Cordilleran orogen in Canada. This synthesis summarized pioneering work in the Canadian Cordillera on the heels of the plate tectonics revolution and development of the terrane concept.

I began studying the Cordillera in 1990 using the framework of suspect terranes as guiding hypothesis. Over the last three decades, significant advances were made in resolving the paleogeographic affinities and tectonic evolution of Cordilleran terranes. In this presentation I will highlight some of my contributions to this evolving understanding of the complexities of the Cordilleran orogen. Proposed links between the Paleozoic tectonic development of the Arctic and western Laurentian margin highlight the role of strike-slip faults and the influence of cratonic drift as a driving force in orogenesis. Advances in U-Pb geochronology of igneous and detrital zircons were critical to developing new interpretations. The westward translation of terranes from the northern Caledonides to Panthalassa resulted in Late Devonian initiation of subduction along western Laurentia. The northward drift of Laurentia through the late Paleozoic accommodated southward transport of terranes and segments of the continental margin. In the early Mesozoic, the westward drift of North America led to initial collision of the Intermontane terranes in the north and southward retreat of the Jurassic subduction was accommodated by development of a sinistral transform system. This evolving tectonic framework provides the foundation for developing regional metallogenetic models to guide resource exploration in the Canadian Cordillera.

TECTONICS OF SOUTHEASTERN YUKON: INSIGHTS FROM THE HYLAND MAPPING PROJECT

David Moynihan, Senior Project Geologist, Yukon Geological Survey

Advances in Geoscience

9:30 AM

Southeastern Yukon includes rocks from three geological domains, which were juxtaposed during Mesozoic deformation: 1) Selwyn basin 2) McEvoy-Cassiar platform and 3) the pericratonic terranes. The Selwyn basin region is dominated by the Neoproterozoic-Cambrian Hyland Group, which has a maximum depositional age of ~662 Ma.

Recognition of stratigraphic markers within the Hyland Group has enabled interpretation of the structure of the Hyland region. Rocks of the pericratonic terranes were thrust onto those of Selwyn basin during the Jurassic-early Cretaceous but are only preserved in a small klippe within the study area. These allochthonous rocks include retrogressed Permian eclogite and ultramafic lenses. Subsequent southwest-vergent deformation produced the dominant structures in the area – recumbent tight to isoclinal folds that have amplitudes of kilometres and can be traced for tens of kilometres along strike. The cessation of regional penetrative deformation was followed by the emplacement of large volumes of intermediate-felsic plutonic rocks, namely those of the Hyland River (~107-105 Ma) and Tay River (~102-98.5 Ma) plutonic suites, as well as smaller intrusions of the Tungsten (~98-96 Ma) suite.

A dextral strike-slip fault system parallel to the Hyland River developed during intrusion of the Tay River suite and was reactivated during the Eocene. Cumulative offset on this orogen-parallel fault zone is > 50 km. Reconstruction of

displacement along this fault reveals that the locus of Hyland and Tay River suite plutonism originally defined a linear trend at a high angle to the orogen. This trend is inferred to record the influence of a north-east trending basement structure that is parallel to the nearby Liard Line.

MID TO LATE CRETACEOUS TECTONOMAGMATIC FRAMEWORK OF THE INTERMONTANE TERRANES IN YUKON

Patrick Sack, Economic Geologist, Yukon Geological Survey; Melissa Friend, Senior Geologist & Associate, Archer, Cathro & Associates (1981) Limited

Advances in Geoscience

9:45 AM

There is an orogen-parallel belt of Late Cretaceous (ca. 82 Ma to 69 Ma) volcanic and shallow level plutonic rocks within the Intermontane terranes from northwestern British Columbia, through Yukon and into eastern Alaska. These are associated with porphyry Cu-Au-Mo, epithermal Au-Ag-Zn-Pb and Cu-Au skarn deposits. We use high resolution geochronology (U-Pb CA-TIMS on zircon, Re-Os TIMS on molybdenite; K-Ar on illite), whole-rock and feldspar isotopic data to develop a revised stratigraphic, plutonic, metallogenic and geodynamic framework for these rocks in Yukon. We suggest magmatism and related porphyry mineralization migrated from the vicinity of the Yukon-British Columbia border northwestward to the Yukon-Alaska border. The Late Cretaceous magmatic rocks have compositional similarities to mid-Cretaceous subduction-related plutonic suites, but become increasingly juvenile and alkalic as they young and migrate northwestward over a span of about 13 m.y. Most studies suggest that Late Cretaceous orogen-parallel fault systems are a first order-control on magmatism; however, we note that the best-preserved Late Cretaceous volcanic rocks are commonly associated with northeast oriented, orogen-normal faults and fault zones with a mid-Cretaceous history. This suggests the mid-Cretaceous framework directly influenced Late Cretaceous porphyry system emplacement and preservation.

GEOCHEMICAL, GEOCHRONOLOGIC, AND METALLOGENIC CHARACTERISTICS OF CRETACEOUS MAGMATISM AND MINERALIZATION IN EASTERN ALASKA: A NEW PIERCING ZONE ALONG THE TERTIARY TINTINA FAULT

Douglas C. Kreiner, Associate Center Director, Geology, U.S. Geological Survey; Erin Todd, James Jones, Chris Holm-Denoma, and Laura Pianowski, USGS Alaska Science Center

Advances in Geoscience

10:05 AM

Cretaceous magmatism is voluminous in eastern Alaska and the western Yukon where it is associated with significant mineral deposits (e.g. Fort Knox, Manh Choh, Casino, Coffee, Dublin Gulch, etc.). Plutons have diverse characteristics indicative of varying source materials and metallogeny. Geochronologic and geochemical analyses of 138 samples from Cretaceous plutonic phases south of the Tintina fault in Alaska show affinities to magmatic belts north of the Tintina fault in the Yukon. Compositionally and metallogenically diverse plutons were emplaced episodically between ca. 115-65 Ma.

Plutons emplaced from 114-108 Ma are weakly to strongly peraluminous displaying steep LREE and shallow MREE-HREE patterns with a negative Eu anomaly. Geochemical variation is evident, with weakly peraluminous plutons characterized by ilmenite fractionation (flat V/Sc vs. Sc slope) in the SE whereas strongly peraluminous plutons are characterized by magnetite(±ilmenite) fractionation in the NW. Only sparse Mo-porphyry style mineralization is associated with these plutons.

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Circa 108-90 Ma metaluminous intrusives occur in the central upland with peraluminous intrusions to the north. Metaluminous plutons have shallower LREE and flat MREE-HREE slopes compared to peraluminous plutons with both exhibiting moderate negative Eu anomalies. Metaluminous intrusions are less alkaline with ilmenite fractionation. Peraluminous plutons trend toward magnetite fractionation (negative V/Sc vs. Sc slope). Metallogeny zones from Au-Cu-Bi in the west, to Au-Bi-W-As-Te in the central and Mo-W in the eastern upland.

Late Cretaceous magmatism occurred from 72-67 Ma with sub-alkaline to alkaline composition and ranges from metaluminous to weakly peraluminous. Plutons have moderate LREE and shallow to flat MREE-HREE slopes. They exhibit evidence for hornblende fractionation (positive V/Sc vs. Sc slope) with associated porphyry Cu-Mo deposits. Hf isotope ratios from the Late Cretaceous suite overlap with but are higher than the middle Cretaceous. All Cretaceous plutons show an increasingly crustal signature to the NW.

Restoration of ~450 km of Tertiary dextral separation across the Tintina fault connects major 108-90 Ma plutonic belts identified in the Yukon with temporally, geochemically and metallogenically similar belts in Alaska. This suggests a genetic link and evolving geologic setting with the continuation of the Tombstone (Au-Cu-Bi, U-Th-F), Mayo (Au-Bi-Te, W, As) and Tungsten (W, Cu-Zn-Mo) plutonic and metallogenic belts into eastern Alaska, revealing untapped exploration potential in Alaska.

PLUTONIC FRAMEWORK FOR THE NORTHWESTERN GOLDEN TRIANGLE

Roddy Campbell, Minerals Geologist, British Columbia Geological Survey

Advances in Geoscience

10:25 AM

We present preliminary results from the first year of a multiyear project aimed at developing a Paleozoic to Eocene plutonic framework for the Golden Triangle. Most mineral deposits in the Golden Triangle are genetically linked to intrusive rocks, and our study will enable an examination of the relationship between the magmatic evolution of the region and magmatic-hydrothermal mineralisation events. Incorporating data from previous publications and recently released geochronological data, we define the following seven plutonic suites in the northern Golden Triangle 1) Aerially extensive arc-related dioritic to granodioritic More Creek plutonic suite (ca. 357 Ma; Mississippian) in the centre of the study area; 2) Small volume arc-related ultramafic to gabbroic Gnat Lake plutonic suite (Late Triassic) in the west of the study area; 3) Aerially extensive arc-related dioritic, quartz monzodioritic to granodioritic Stikine plutonic suite (ca. 230-216 Ma; Late Triassic) associated with the Schaft Creek porphyry Cu-Au-Mo deposit in the west of the study area 4) Small volume syn-collisional (foid) syenitic to monzodioritic Galore plutonic suite (ca. 212-204 Ma; Late Triassic) associated with the Galore Creek porphyry Cu-Au deposit, and present throughout the study area; 5) Small volume monzodioritic to monzonitic Texas Creek plutonic suite (ca. 204 to 189 Ma; latest Triassic to Early Jurassic) associated with the Mary and Williams porphyry Cu-Au prospects in the east of the study area; 6) Aerially extensive syn-collisional dioritic to granodioritic Cone Mountain plutonic suite (ca. 185 Ma; late Early Jurassic) in the westernmost part of the study area; and 7) small- to large-volume post-collisional dioritic to granitic Three Sisters plutonic suite (ca. 177-169 Ma; Middle Jurassic) throughout the study area.

REFINING OUR UNDERSTANDING OF THE WELL-ENDOWED HAZELTON GROUP STRATIGRAPHY

Kate Rubingh, Postdoctoral Fellow at MDRU, University of British Columbia

Advances in Geoscience

10:40AM

The Hazelton Group is a late Triassic to middle Jurassic aged sequence of volcano-sedimentary rocks, and associated intrusive rocks, that lie within the Stikine Terrane of northwestern British Columbia, which represents a complex arc and back arc accretionary terrane. Throughout the stratigraphy of the Hazelton Group numerous significant Au, Ag volcanogenic massive sulphide (VMS), epithermal Au, and Cu-Au porphyry deposits are located, and several world class deposits notably: Au rich Eskay Creek VMS, Brucejack epithermal Au-Ag and Red Chris porphyry Cu-Au deposits.

A multiyear project was initiated with a focus on key mining camps within the Hazelton Group, applying volcanic facies mapping, geochemistry and geochronology to refine the lithostratigraphic setting and paleo architecture of the Stikine Terrane in these well-endowed areas.

Recent volcanic facies mapping of the lowermost Hazelton Group documented significant voluminous effusive basaltic to andesitic volcanism, with evidence from a succession of pillow lavas, in-situ monomictic breccias, pillow breccias and interbedded sedimentary packages of argillites, which were previously not recognised within the Stewart mining camp and can be correlated with a correlative package of rocks, defined as the Unuk member of the Hazelton Group, which is host to mineralization within the Stewart camp. Combining new volcanic facies mapping, geochemistry of the stratigraphic units and U-Pb detrital zircon geochronology, can further our understanding of the sub-basin architecture and proximity to the Eskay rift within the Stewart Mining camp.

PETROGENESIS AND DEVELOPMENT OF MAGMATIC NI-CU-PGE MINERALIZATION IN THE CONVERGENT MARGIN SETTING

Dejan Milidragovic, Research Scientist, Geological Survey of Canada

Advances in Geoscience

10:55 AM

Ultramafic-mafic intrusions in convergent margin settings have long recognized for their platinum group element (PGE) potential. They may also host considerable magmatic Ni-Cu-PGE sulfide mineralization in olivine-dominated dunite and wehrlite (e.g., Turnagain intrusion) as well as notable palladium-subgroup PGE (PPGE) concentrations in association with Cu-rich sulfides (e.g., chalcopyrite ± bornite) in clinopyroxene- and hornblende-rich rocks (e.g., Tulameen and Polaris intrusions in British Columbia). The formation of magmatic Ni-rich sulfides in dunite and wehrlite is favoured when oxidized primitive arc magmas assimilate S-rich and/or relatively reduced country rock. Differentiation of primitive arc magma without significant country rock contamination favours crystallization of platinum group minerals (PGM) in dunite and immiscibility of Cu-PPGE-Au-rich sulfides from more evolved (clinopyroxene-magnetite±hornblende-saturated) magmas. The nature of PGM (Pt-enriched vs. IPGE-enriched) and the onset of sulfide immiscibility in systems not affected by country rock assimilation are governed by the oxidation state of the primary magma. Predominance of Pt-alloys, such as those in the Tulameen intrusion, indicates strongly oxidized parental magmas ($\log f(O_2) \geq FMQ+1$), where fS_2 is low and Pt is likely to be near saturation. In contrast, absence of Pt-alloys and predominance of Ir-Ru-Os alloys and laurite (e.g., Polaris) indicates less oxidized parental magmas ($\log f(O_2) \leq FMQ+1$) where fS_2 is relatively high. In the absence of country rock assimilation, sulfide immiscibility may be triggered by magnetite fractionation promoting reduction in the oxidation state of the magma, or by magma mixing.

ABSTRACT GUIDE 2025



CRITICAL MINERALS IN BC VOLCANOGENIC MASSIVE SULFIDE (VMS) DEPOSITS: A PROGRESS REPORT

Stephen Piercey, Dorota Pietruszka, and Dylan Goudie, Memorial University of Newfoundland

Advances in Geoscience

11:05 AM

Volcanogenic massive sulfide (VMS) deposits have been important contributors of Cu, Zn, Pb, Au, and Ag to the Canadian and BC economy; however, there is an incomplete understanding of the importance of critical metals in VMS deposits globally, including in BC. This presentation provides preliminary results of a project started in 2023-2024 on critical metals in BC VMS deposits. Results from assays, reflected light microscopy, and scanning electron microscopy (SEM) of VMS deposits indicate that they have diverse elements from the 2024 Canadian critical minerals list. Most contain Cu and Zn as primary commodities with varying concentrations of Co, In, Sb, Sn, Te. Felsic-hosted deposits have greater enrichments in Zn, Pb, As, Ag, Au, Cd, Ga, and Sb relative to mafic-hosted deposits, which have enrichments in Cu, Co, Fe, In, Mn, Mo, Se, Sn and Te. The Zn-Pb-element associations likely reflect deposition from low-temperature (<300°C) VMS fluids, whereas the Cu-rich assemblages represent deposition from higher temperature (>300°C) VMS fluids. Reflected light microscopy and scanning electron microscopy indicate that the main mineral hosts for critical minerals are chalcopyrite (Cu) and sphalerite (Zn) and to a lesser extent bornite (Cu), covellite (Cu), and tetrahedrite (Cu, Zn, Sb). Suites of relatively minor phases occur as small grains in different mineral groups including: 1) sulfides - stannite (Cu, Sn, In?), bismuthinite and Ag-bearing bismuthinite (Bi); 2) arsenides and antimonides - berthierite (Sb), cobaltite (Co), Ni-bearing cobaltite (Co,Ni), stibnite (Sb), jamesonite (Sb), and ullmannite (Sb, Ni); 3) tellurides - hessite and empressite (Te); and 4) native elements and oxides - native bismuth (Bi) and cassiterite (Sn). Future work will focus on quantitative mineral compositions and determination of major, minor, and trace metal concentrations in various mineral phases using electron probe microanalysis (EPMA) and laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS).

CRITICAL METALS IN BC PORPHYRY AND SKARN SYSTEMS

Evan Orovan, Senior Economic Geologist, British Columbia Geological Survey

Advances in Geoscience

11:30 AM

Critical minerals are essential for advancing low-carbon technologies, including electric vehicles, renewable energy systems, batteries, and medical devices. As global energy systems transition to low-carbon alternatives, the demand for critical minerals is increasing, emphasizing the need for a diversified supply. In British Columbia, porphyry deposits—responsible for producing over half of Canada’s copper and all its molybdenum—also contain significant by-products such as platinum group elements, rhenium, tellurium, tungsten, tin, zinc, bismuth, and rare-earth elements, hosted in a variety of mineral phases.

The diversity of porphyry deposits in British Columbia arises from variations in magma sources, tectonic settings, and hydrothermal environments, resulting in distinct mineralogical and geochemical characteristics. To maximize the potential of these deposits, it is essential to inventory and characterize the critical minerals they contain. Mineral liberation analysis provides detailed mineralogical and textural data, offering insights into the distribution and associations of these minerals.

This study presents preliminary mineral liberation analysis results from an ongoing campaign to fingerprint critical minerals within the diverse classes of porphyry deposits across British Columbia. These findings contribute to understanding the mineralogical variability and critical mineral potential of the province’s porphyry systems, supporting sustainable resource development and strategic mineral supply diversification.

COMMODITIES AND FINANCIAL MARKETS

THE IMPACT OF FISCAL POLICY ON MINERAL EXPLORATION FINANCE

Kendra Johnston, Managing Director, PearTree Securities Inc.

Commodities and Financial Markets

9:00 AM

Charity flow-through transactions are the primary method used to finance junior exploration companies, representing 74% of all dollars raised in the public markets for exploration in Canada. Over the course of the last 3-4 years, we have seen global interest from governments and the general public in mineral and metal exploration, production and processing primarily in the context of the green energy transition. This interest has spurred policy discussions, incentives, and investments in our sector from governments, but these items aren't always implemented as effectively as intended due to the realities, timeframes and challenges on the ground. This presentation will discuss policy initiatives and recent changes made by the Canadian Revenue Agency and consider the impact these changes are having on financing the junior mineral exploration sector. Finally, we'll touch on some practical lessons learned from the past two years that highlight the opportunity for policy improvements that would directly incent exploration, on the ground, today.

INTELLIGENTLY (AI+HI) EVALUATING DRILL RESULTS TO AID INVESTMENT DECISIONS

Joe Mazumdar, Editor/Analyst, Exploration Insights

Commodities and Financial Markets

9:25 AM

Pre-resource exploration plays offer significant financial rewards (10x) but at great risk. Therefore, understanding the significance of the 'post-discovery' drilling is critical to culling the low-value/high-risk assets or holding (or adding) the high-potential deposits or 'unicorns'. A combination of machine learning (artificial intelligence), which can probabilistically model a resource, and human intelligence (site visits, technical expertise) can go a long way to improving an investor's odds of wading through the plethora of early-stage exploration companies without having access to the data-room and signing an NDA.

CAPITAL INSIGHTS: NAVIGATING THE TRENDS AND PITFALLS IN RESOURCE FINANCINGS

Arash Adnani, Founder, PrivatePlacements.com, Blender Media

Commodities and Financial Markets

9:50 AM

This data-driven presentation, leveraging insights from PrivatePlacements.com's financings database, explores key trends in natural resource financings, outlining how capital is distributed among explorers, developers, and producers. Attendees will gain insights into which commodities are attracting the most financing and how these trends shift year-over-year. The session also examines jurisdictional preferences, financing structures, and the factors driving positive returns, while highlighting common mistakes issuers make when raising capital.

ABSTRACT GUIDE 2025



TRANSFORMING MINING THROUGH FEMALE OWNERSHIP - A CASE STUDY OF INCLUSIVE INVESTMENT IN MINERAL EXPLORATION

Beth Borody, CEO and Founder, The Femina Collective and The Femina Investment Club

Commodities and Financial Markets

10:15 AM

In an industry where women constitute only 15% of the workforce, this study examines a novel approach to address gender disparities in mining investment and ownership. We explore the establishment of a women-focused Limited Liability Partnership aimed at increasing female project ownership in exploration and mineral development. With Canada's critical minerals strategy allocating \$1.5 billion to industry growth and US government-backed investment into Canadian projects, the timing is crucial to expand gender diversity in investment.

We analyze challenges faced by women in mining, focusing on ownership underrepresentation, and explore how this initiative aligns with sustainability and responsible mining practices. The study examines transformation potential through increased female-focused project investment, focusing on responsible development criteria such as Indigenous participation and ESG considerations. This case study contributes to the dialogue on diversity and inclusion in mining, offering insights into strategies for creating equitable environments while supporting industry growth.

BATTERY POWERPLAY - ARE BATTERY METALS STILL INVESTABLE?

Rowena Alavi-Gunn, Senior Analyst, Wood Mackenzie

Commodities and Financial Markets

10:40 AM

The re-election of Former President Trump to the White House is expected to have a significant effect on the metals market. The new US administration has the opportunity to rewrite auto sector regulatory norms and policies favouring the oil and gas industry, and to limit or modify IRA provisions weakening renewable incentives. In this talk we present the latest commodity outlooks for some key battery metals and discuss if these are still investable: How will the new US Republican administration impact global electric vehicle supply chains? What are the latest supply/demand outlooks for battery metals? Are battery metals markets big enough to attract the Majors investment? And when diversifying, is it currently best to buy or build?

GEOPOLITICAL PREVIOUS METALS OUTLOOK

Emil Kalinowski, Director, Metals Market Research, Wheaton Precious Metals

Commodities and Financial Markets

11:05AM

A review of the analyst consensus for precious metals—gold, silver, platinum, palladium—prices, supply and demand for the rest of the decade to see where great power politics is—and is not—priced in.

USING OREBODY KNOWLEDGE TO UNLOCK NORTHERN SASKATCHEWAN'S COPPER-ZINC POTENTIAL: THE TESLA AND BRIDGE ZONE DISCOVERIES

Erin Carswell, Vice President, Exploration, Foran Mining

Critical and Base Metals

1:35 PM

Advances in exploration technology and increasing emphasis on orebody knowledge has enabled new discoveries and generated targeting opportunities across the mining industry. In northeastern Saskatchewan, Foran Mining has made two new copper-zinc discoveries by application of structural geology, tailored geophysics and geochemical core scanning techniques. Both discoveries augment Foran's ~40Mt McIlvenna Bay Copper-Zinc-Gold-Silver Deposit (discovered 1988; currently in mine construction phase) and demonstrate the revitalization of an historically neglected part of the Flin Flon VHMS belt. Furthermore, ongoing orebody knowledge studies have opened new doors to targeting copper mineralization across Foran's extensive claims package.

The first of Foran's new discoveries was made during 2022, when several holes were designed to test a 900m-long ground electromagnetic target that coincided with an interpreted structure located approximately 300m north of the McIlvenna Bay Deposit. While the first drill hole intersected encouraging alteration, the second drilled down-dip through a thick zone of sulphide mineralization – providing the first evidence of the Tesla Zone mineralization. Since then, delineation drilling has revealed a series of stacked copper-zinc-gold-silver lenses that extend over 1200m along strike and least 400-500m down-dip, with an average combined thickness of approximately 30m.

During the Tesla delineation drilling, Foran employed Veracio's TruScan ED-XRF core scanning technology to gain top-to-bottom drillhole geochemistry data. Combining interpretation of this data with findings of the ongoing McIlvenna Bay Orebody Knowledge led to the prediction of a new chemostratigraphic target between the McIlvenna Bay Deposit and the Tesla Zone. Notably, this new target had no associated electromagnetic anomaly in the existing dataset. The initial drillhole designed to test the concept successfully intercepted 16m of continuous zinc and copper sulphide mineralization, followed by an additional three intersections of mineralization during subsequent drilling. The new mineralization was named the Bridge Zone, as it appears to form an important link between McIlvenna Bay and the Tesla Zone.

With over forty drillholes now successfully intersecting Tesla and the Bridge Zone, efforts to acquire relevant orebody knowledge data continue to open intriguing targeting avenues. Significantly, collection of continuous borehole petrophysical data has recently demonstrated that the Tesla electromagnetic conductivity anomaly is primarily the result of pyrite occurring within zinc-rich lenses. However, within Tesla's copper-dominant stockwork zones the conductivity response of the rocks is muted, and mineralization is better differentiated by high a chargeability response - which would not be detected by electromagnetic surveys. Induced polarization geophysics may therefore be a more appropriate technique for detecting additional copper mineralization, thus presenting a significant opportunity for Foran Mining to generate a new suite of targets during 2025.

The Tesla and Bridge Zone discoveries exemplify the importance of building orebody knowledge to increase exploration success. By understanding the geological, geochemical, structural and petrophysical characteristics of a deposit, we can improve models of ore genesis and better anticipate how mineralization will manifest in geophysical data. This results in recognition of new opportunities, generation of higher-quality targets, and a higher rate of new discoveries.

ABSTRACT GUIDE 2025



DISCOVERY STORY AND CAMP UPSIDE POTENTIAL OF THE COKA RAKITA SKARN DEPOSIT IN SERBIA

Jelena Zivanovic, Nutu Groza, Mladen Zdravkovic, Ivan Strmbanovic, Ivana Suzic, Istvan Marton, and Paul Ivascanu, Dundee Precious Metals; Kalin Kouzmanov, University of Geneva; Aleksandar Pacevski, Faculty of Mining and Geology Belgrade

Critical and Base Metals/Core Shack
2:00 PM

The Coka Rakita deposit is situated in the northwestern area of the Late Cretaceous Timok Magmatic Complex, a metallogenetic district in Serbia, hosting world-class copper-gold porphyry (Majdanpek, Veliki Krivelj, Borska Reka) and high-sulfidation deposits (Bor, Cukaru Peki). Coka Rakita is a recent high-grade gold skarn discovery, with unique mineralogical and grade characteristics not only for the Timok district, but for the entire Western Tethyan Belt, with maiden inferred mineral resources of 1.78 Moz of gold.

The primary economic mineralization at Coka Rakita is associated with exoskarn, which forms massive stratabound bodies by replacing a calcareous clastic sedimentary sequence located in the hanging wall of a sill-like porphyritic diorite and east of a major monzonitic intrusion. This mineralization also extends into the endoskarn zone of the diorite, reaching several meters from the intrusive contact.

Gold mineralization is primarily linked to andradite-grossular garnet skarn with minor pyroxene, K-feldspar, wollastonite. Extensive intervals of the prograde skarn are overprinted by a retrograde mineral assemblage that includes epidote, chlorite, calcite, albite and minor actinolite, along with late-stage andradite and sulfides. Gold occurs as disseminations and frequently as visible aggregates up to few millimeters in size, hosted by various gangue and sulfide minerals, mainly by garnet and less commonly in pyrite, epidote, K-feldspar, and albite.

The Dumitru Potok prospect, featuring copper-gold-silver stratabound skarn mineralization is situated about one kilometer northeast of Coka Rakita. Mineralization occurs within marble-skarn altered limestone and the overlying reactive clastic unit, near fertile diorite porphyries that also host a weak to moderate copper-gold mineralization. Copper-gold-silver mineralization is associated with high levels of iron present as abundant iron-oxides and iron-rich silicates. The mineral paragenesis is zoned and features overlapping assemblages of pyrite, chalcopyrite, bornite, chalcocite, digenite and native copper, with increasing Cu/Fe and Au/Cu ratios and decreasing sulfur content toward depths.

DISCOVERING NICKEL THROUGH PREDICTIVE MODELLING IN QUEBEC

Jean-Marc Lulin, President & CEO, Azimut Exploration Inc.

Critical and Base Metals
2:25 PM

Nickel is a key metal in the energy transition, but its market is experiencing significant volatility. More than ever, production is dominated by lateritic ore from Indonesia and controlled by China. This increased capacity has led to overproduction, low prices, and added geopolitical risk and environmental challenges in the supply chain. As the demand for nickel is expected to grow, discovering high-quality sulphide nickel ore bodies in North America is increasingly important.

Quebec is competitively positioned to face this challenge with its favourable geology, excellent geoscientific database and reliable business environment. In this context, Azimut conducted a nickel-focused predictive modelling initiative over the James Bay region (174,208 km²), which is one of the province's most prospective but underexplored regions for nickel.

ABSTRACT GUIDE 2025



Targets were generated using the proprietary AZtechMine™ expert system, driven by regional data processing combining geochemistry (multi-element lake sediment) and geophysics (magnetics, gravity). This approach used a combination of criteria that statistically captured and recognized the specific signature of known prospects within the region. Comparable signatures in unexplored sectors have the potential to represent valuable new targets. This initiative led Azimut to acquire about 200 nickel targets (3,663 claims, 1,907.7 km²), mainly ultramafic intrusions that could have acted as synvolcanic conduits and may contain substantial accumulations of Ni-Cu-Co-PGE massive sulphides. Eagle's Nest (Ring of Fire, Ontario) was notably used as a reference.

Azimut has now validated its predictive modelling approach with two recent grassroots discoveries:

- On the Wapatik Property, drilling returned 2.68% Ni and 1.30% Cu over 3.30m within a previously unrecognized ultramafic intrusion.
- On the Kukamas Property (under option with KGHM), channel sampling returned 2.98% Ni, 0.32% Cu, and 2.25 g/t PGE over 8.0m within komatiitic volcanics.

THE CISCO LITHIUM PROPERTY: EARLY STAGES OF EXPLORATION WITH WORLD-CLASS DRILL RESULTS

Neil McCallum, Director and VP of Exploration, Q2 Metals Corp.

Critical and Base Metals/Core Shack 2:50 PM

Located in the James Bay Lithium District of James Bay, an emerging district of global significance, is the Cisco Lithium Property of Q2 Metals Corp. The Property is situated in the western stretch of the Frotet-Evans Greenstone Belt, located in the southern portion of the James Bay Lithium District.

Despite the history of gold and VMS exploration along the greenstone belt over the last few decades, lithium-bearing pegmatite had not been noted. It was not until 2022, when prospecting crews of Canadian Mining House collected mineralized samples at a reconnaissance-scale. This initial discovery was followed up in the fall of 2023, after a long pause due to the prolific forest fire season with six drill holes.

Q2 Metals acquired the Cisco Lithium Project in February 2024 and work started in late-May of that year. Detailed surface mapping uncovered 23 distinct mineralized zones over a surface area spanning 1900 long by 1500 metres wide. An additional 17 drill holes uncovered several continuous spodumene-pegmatite intervals with greater than 100 metres of pegmatite, with the highlight hole results of 347.1 metres, averaging 1.35 percent lithium. These drill results are the most significant results to-date in the James Bay District from a grade-times-width perspective and are comparable to results of other large pegmatite systems across the globe.

The limited outcrop exposure of the pegmatite at surface has proven to be a significant challenge. The “true” orientation of the lithium intrusions is often difficult to determine at surface, and equally difficult down-hole. The lithium-deposit systems-model for the emplacement of pegmatite in the James Bay District appears to follow a few distinct patterns. The information collected at the end of the season at Cisco, with down-hole Optical Televiewer technology has confirmed that the recent drilling orientation is nearly perpendicular to the strike of the intrusion.

ABSTRACT GUIDE 2025



THE THELON BASIN THEN AND NOW: A GEOLOGIST'S TALE OF URANIUM EXPLORATION

Dr. Rebecca Hunter, Vice President, Exploration, Forum Energy Metals Corp.

Critical and Base Metals

3:15 PM

The Thelon Basin is one of a few large, Proterozoic intracratonic sandstone basins in the world with the potential to host large tonnage and high-grade, unconformity-type uranium deposits. The difference is that the Thelon Basin is located within Canada's arctic and as a result has seen only a fraction of the exploration that the Athabasca Basin in Saskatchewan has undergone.

Since the 1970s exploration in the Thelon Basin has been in short, abbreviated spurts due to commodity and market downturns, as well as nuclear-related geopolitical events and sentiment. The last significant discoveries in the Thelon Basin were in the 1980s, which included the End and Andrew Lake deposits. The most recent major discoveries were by Cameco in 2009 and 2010 with the discoveries of the Qavvik and Tatiggaq zones after only 3 years of total exploration in the area, which demonstrates the significant untapped potential of the area.

The world requires a new uranium producing district to supply safe and stable uranium resources to the western world as we move towards decarbonization and to fulfill increasing energy requirements. The Thelon Basin is an early-stage fertile basin with known uranium resources so adapting the right model with a long enough timeframe to drill effectively is the key to discovery. Forum Energy Metals acquired Cameco's uranium deposit discoveries and exploration land adjacent to Orano's Kiggavik Project, which hosts 3 uranium deposits with an indicated resource of 127 mlbs at 0.55% U₃O₈. We believe that we are on the verge of unlocking a new uranium district. Forum has the right team with the right knowledge to evolve the unconformity uranium model, and perhaps the right time in our history as nuclear power is embraced globally. Forum hopes to demonstrate through discovery that the Thelon Basin can be an important future world supplier of uranium.

PIKE ZONE – ADVANCING A HIGH-GRADE URANIUM DISCOVERY

Nathan Bridge, VP Exploration, CanAlaska Uranium

Critical and Base Metals

3:40 PM

The West McArthur Project is an exploration-stage uranium project located in the southeastern Athabasca Basin of northern Saskatchewan, Canada. The Project is located approximately 15 km west of Cameco and Orano's McArthur River Mine and is host to a new high-grade unconformity-associated uranium deposit called the Pike Zone. The West McArthur Project is a Joint Venture between CanAlaska Uranium Ltd and Cameco Corporation, with CanAlaska Uranium Ltd as the current project operator.

The Pike Zone discovery was made in July of 2022 with the completion of drill hole WMA067 which was targeting a regional electromagnetic conductor on the C10S conductive corridor. The C10S corridor is an interpreted splay off the main C10 corridor, which is host to the West McArthur 42 Zone discovery and Cameco and Orano's nearby high-grade Fox Lake uranium deposit. WMA067 intersected basement-hosted uranium mineralization, consisting of 2.4% U₃O₈ over 9.0 metres, approximately 100 metres below the sub-Athabasca unconformity. Subsequent drilling in 2022 and 2023 led to the delineation of unconformity-associated uranium mineralization over approximately 160 metres at the sub-Athabasca unconformity. In addition, basement-hosted uranium mineralization was delineated over 160 metres down into the basement along the controlling structures.

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In February of 2024, drilling at the Pike Zone intersected high-grade unconformity-associated uranium mineralization in drill holes WMA082-4 and WMA082-6 consisting of 9.9% U₃O₈ over 14.5 metres and 14.9% U₃O₈ over 9.6 metres, respectively. The West McArthur Joint Venture is currently focused on the continued delineation and expansion of the Eastern Athabasca Basin's newest high-grade unconformity-associated uranium discovery – the Pike Zone.

ENVIRONMENTAL, SOCIAL & GOVERNANCE

THE OTHER WATER CYCLE

Lynda Smithard, COO, McCue Engineering Contractors

ESG

1:40 PM

The mining industry is evolving to embrace a circular water economy, recognizing water as a critical resource for sustainable operations. By implementing water reuse and recycling strategies, mines can reduce their reliance on freshwater sources, minimize environmental impact, and enhance operational efficiency.

BC Mining's commitment to a circular water economy exemplifies this industry-wide shift. By investing in water management infrastructure and workforce development, BC mines are not only securing their long-term viability but also contributing to the economic and social well-being of the Province.

Through partnerships with local businesses and communities, BC Mining is demonstrating the broader impact of sustainable mining practices. By creating jobs, supporting education and training programs, and stimulating economic activity, the mining industry plays a vital role in securing our future.

BC Mining's adoption of a circular water economy showcases the industry's potential to be a catalyst for positive change. By prioritizing water stewardship and investing in sustainable practices, the mining sector can ensure a prosperous future for both the industry and communities across the Province.

TRACEABILITY AT SCALE: THE UNITED NATIONS TRANSPARENCY PROTOCOL

Nancy Norris, Senior Director, ESG & Digital Trust, BC Ministry of Mining and Critical Minerals

ESG

2:05 PM

This session will profile the United Nations Transparency Protocol, a global standard for digital data exchange to achieve verified, trustworthy product traceability along critical mineral supply chains. UNTP is a protocol, not a platform, and creates a methodology and set of tools that critical minerals supply chain actors can use to interoperably link data about their products. Together with TSM, the CopperMark, and a growing list of traceability software solution providers, the BC Government is adopting UNTP to empower B.C.'s mining industry with practical, low-cost digital tools to achieve product differentiation, maximize the value of existing permitting and ESG compliance efforts, counter greenwashing, and support a more responsible global economy. This includes influencing which digital solutions are adopted by customs authorities in the European Union and USA for compliance with supply chain due diligence requirements. The Responsible Business Alliance, which members include over 250 major electronics and automotive companies, such as Microsoft, CISCO, Intel, Google, BMW and Ford, recently announced their adoption of UNTP to create a traceability system for their members.

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BLACKWATER MINE TRAINING & EMPLOYMENT APPROACH

Mila Gajic, VP, Human Resources, Artemis Gold Inc.

ESG

2:30 PM

Join us as we explore how Blackwater Mine, a subsidiary of Artemis Gold Inc. and its sole asset, strategically approached employment and training throughout its project phase, in preparation for operations, and during a challenging talent market characterized by low unemployment and high demand for skilled workers. This session will provide insights into the initiatives and strategies that supported workforce readiness and addressed the "war for talent" within the mining industry.

CANADIAN CLIMATE AND SUSTAINABILITY DISCLOSURE FRAMEWORK RISKS TO MINERS

Daniela Jara, Intermediate Energy Specialist, SysEne Consulting

ESG

2:55 PM

The risks and costs associated with climate- and sustainability-related regulations and disclosure legislation are increasingly impacting the mining sector in Canada. This presentation examines the implications of various climate change and emissions regulations, as well as disclosure legislation, on mining projects and offers strategies for compliance and achieving competitive advantages.

The discussion specifically focuses on the Low Carbon Fuel Standard (LCFS), Output-Based Pricing System (OBPS), and Bill C-59. Attendees will gain insights into navigating the costs and risks these frameworks pose, which can significantly affect operational baselines.

- The Low Carbon Fuel Standard (LCFS) is expected to lead to higher fuel costs, while miners may also face escalating supply chain challenges and increased reporting requirements. However, the presentation will highlight potential opportunities to reduce OBPS- and Bill C-59-related costs and risks through strategic adaptations.
- The Output-Based Pricing System (OBPS) in BC, along with similar systems such as Ontario's Emissions Performance Standards (EPS), incentivizes greenhouse gas (GHG) reductions by benchmarking industry-specific emissions. The talk will demonstrate how these systems can shape business cases for alternative technologies and showcase low-risk, cost-effective decarbonization pathways.
- Bill C-59: The bill introduced stricter oversight of environmental claims to combat greenwashing. Starting in 2025, mining companies could face increasing disclosure risks. The presentation will outline the major risks associated with climate and carbon emissions disclosure and provide strategies to mitigate them effectively.

By addressing the legislative and regulative climate change and carbon emissions-related legislative landscape, this talk will guide mining companies through the challenges and opportunities, helping them navigate the decarbonization process in a risk- and cost-effective manner.

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TNDC HEO TRAINING PROGRAM - AME ROBERT R. HEDLEY 2024 AWARD RECIPIENT

Taylor Smith, General Manager, Construction, Tahltan Nation Development Corporation

ESG
3:20 PM

PRECIOUS METALS

GOLD IN GREENSTONE BELTS: DIVERSITY AND EXPLORATION IMPLICATIONS

Francois Robert, Consultant, FR Geo-consult

Precious Metals
9:10 AM

Greenstone belts host a significant proportion of the world's gold and share a common evolution that spans ~100 my. Cyclic volcanism is followed by clastic sedimentation that marks the onset of orogenic contraction, which involves early folding, development angular unconformity with overlying conglomeratic units, and across-belt shortening responsible for structural trends and folds, and penetrative fabrics.

Their gold deposits display significant diversity of ore and structural styles, alteration footprints, and time of emplacement. Such diversity requires consideration of multiple exploration (and genetic) models. Three end-member models in a continuum provide a useful framework for exploration. Quartz-carbonate vein arrays and BIF replacements associated with contractional structures account for most deposits and are the original essence of the orogenic model. These have formed during the late shortening of the belts at mid-crustal levels. Intrusion-associated deposits consist of high-level-textured veins and breccias, veinlet stockworks or disseminated sulfide zones, spatially associated with hypabyssal porphyritic intrusions. Cross-cutting post-mineral dykes constrain many to have formed "early" and at high crustal levels. Finally, less common Au-rich VMS deposits, formed during volcanism, are present in some belts.

At the regional and district scales, all deposit types occur along regional structures. They cluster in areas of geometric complexities, of high-level intrusive centers, and of upper stratigraphic preservation. At the local scale, orogenic vein arrays are associated with 3rd order reverse structures or folds and with competent small volume intrusions, within broader carbonate alteration footprints. Intrusion-associated deposits occur around small porphyritic intrusion, near unconformity, within distinct alteration and pathfinder footprints. Au-rich VMS deposits occur near the felsic top of volcanic sequences in association with domes and their proximal volcanoclastic products, within broad sericite-pyrite alteration. Successful exploration requires scale-dependent criteria that reflect key attributes, favorable settings, and local controls of the targeted model(s).

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SOUTH PACIFIC METALS AND THE RESURGENCE OF GOLD AND COPPER EXPLORATION IN PAPUA NEW GUINEA

Cathy Fitzgerald, President & Chief Geologist, South Pacific Metals Corp.

Precious Metals/Core Shack

9:40 AM

South Pacific Metals Corp. is a Canada-based gold-copper exploration company with four projects spanning over 3,100 km² in Papua New Guinea, a region renowned for its world-class mineral resources. These can be large and rich deposits of diverse styles including giant and well-preserved porphyry-epithermal systems, basement hosted mesothermal gold systems and polymetallic, structurally hosted massive sulfide systems, among others. Although there were periods of intense exploration over the last 60 years, many regions remain unexplored, under-explored, or warrant re-evaluation of historical deposits. This presents substantial opportunity for new discoveries and growth of undeveloped deposits, especially with rising gold and copper prices, shifting operator motivations and advancement of exploration methods and technologies. Integrating knowledge of key deposit characteristics in PNG—such as geophysical signatures, metal pathfinder assemblages, and structural settings—can enhance exploration strategies.

The Company's four projects - Osená, Anga, Kili Teke, and May River - offer diverse discovery and growth opportunities and are strategically located in mineral-rich districts near world-class deposits. Current exploration is focused on the Osená (626 km²) and Anga (461 km²) projects in the Kainantu District, where each host multiple promising gold-copper prospects with evidence of similar mineralization styles as those within the adjacent tenements held by K92 Mining Ltd. Each project hosts low-sulfidation epithermal gold veins, gold-rich hydrothermal breccias and outcropping Cu-Au-Mo mineralized intrusive suites possibly associated with buried porphyry systems. Importantly, there are several lines of evidence (geology, alteration, geophysical signatures, and metal pathfinder assemblages) suggesting that some lode-gold systems present on nearby K92's tenements extend onto the Anga Project. With a range of exciting prospects and similar features to known major deposits in the region, the Osená and Anga Projects are prioritized for drilling in early 2025, and are key components of South Pacific Metals' growth strategy.

GOLD EXPLORATION POTENTIAL OF THE LAVRAS DO SUL INTRUSIVE COMPLEX – FOCUSING TO ENCOURAGE SUCCESS

Michael Durose, President & CEO, Lavras Gold Corp.

Precious Metals/Core Shack

10:05 AM

Located in Southern Brazil, the Lavras do Sul Intrusive Complex (LDIC) is the geological setting for multiple gold and gold-copper showings displaying magmatic, mesothermal and epithermal characteristics. Gold was first discovered in the Rio Grande do Sul shield region by Portuguese-led pioneers in the late 1770s. Various European consortiums explored and mined gold in the area until the 1950s and sporadically in the early 1980s. Brazil-based company CBC drilled Lavras in the 1980s. Modern exploration began in the early 2000s.

The LDIC has at least five types of gold mineralization including: 1) epidote and alkali feldspar syenogranite (perthitic granite with milky quartz and chlorite) found only in the southwest portion of the Lavras property, is related to intense metasomatism, hydrothermal alteration, and NNE lineaments (Butia and Fazenda do Posto discoveries); 2) structural lineaments, associated cataclasis and hydrothermal alteration with hematite, phengite mica, quartz-carbonate veining and sulphide-bearing quartz stockwork (Olaria, Caneleira, Cerrito, and Matilde targets); 3) visible gold associated with silicified veinlets in a stockwork of fractured granitoids (Zeca Souza and Galvao targets); 4) a possible mesothermal style of

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mineralization found in the eastern part of the complex characterized by actinolite, fluorite and intense hematization hydrothermal alteration (Aurora, Valdo Teixeira, and Dourada areas); and 5) thin Cu-Au veins associated with volcanic rocks east of LDIC.

The average grade of Butiá and Fazenda do Posto, two of the more advanced projects drilled to date, is about 1 g/t gold. Gold is associated with relatively simple sulphide mineral paragenesis consisting of disseminated pyrite and lesser associations of arsenian pyrite, galena, sphalerite, arsenopyrite and molybdenite. Preliminary metallurgy suggests straight forward gold recovery.

The Neoproterozoic Rio Grande do Sul Shield has experienced minimal erosional cycles, suggesting that blind mineralized bodies without any surface manifestation of gold may exist (e.g. Fazenda do Posto). Metasomatism and chemical modification has led to a loss of rock volume manifesting itself in the form of recessive topography. Geomorphology is an excellent exploration tool for locating areas of extensive hydrothermal alteration and possible gold mineralization.

GEOLOGY AND EXPLORATION POTENTIAL OF EQUINOX GOLD'S GREENSTONE MINE AND THE BEARDMORE-GERALDTON BELT

Scott Heffernan, EVP Exploration, Equinox Gold Corp.

Precious Metals

10:30 AM

Equinox Gold's flagship Greenstone Gold Mine in Geraldton, Ontario, is hosted within the Archean Beardmore-Geraldton Belt (BGB). The BGB extends for over 100 km from Lake Nipigon to the west to Long Lake to the east, and has historically produced over 4.1 million ounces of gold, primarily in the 1940's and 50's. After nearly three years of construction, Greenstone achieved commercial production in November 2024 and is expected to produce 5.7 million ounces of gold over an initial mine life of 15 years.

Greenstone is an orogenic gold deposit associated with major crustal-scale structures, porphyry intrusions and alternating linear metavolcanic and coarse and turbiditic metasedimentary rock panels. The BGB underwent three major deformation events. The polyphase gold mineralization is characterized by multiple quartz-carbonate and tourmaline-quartz vein generations and associated wall-rock sulphidation hosted primarily by strongly deformed turbiditic sandstone with minor iron formation intercalations, and feldspar-quartz porphyry.

With construction complete and production underway, Equinox Gold's focus is shifting to exploration. Greenstone itself boasts a significant underground Mineral Resource, which extends well beyond the limit of the current open-pit design and remains open down plunge. Near-mine exploration targets include several past-producing mines, such as Key Lake and Kailey, that already have defined Mineral Resources. Near the western end of the BGB, the Beardmore property hosts three historic mines with historical production of more than 1 million ounces at grades over 10 g/t gold, representing very attractive exploration targets. Most of the newly consolidated 396 km² land package has had little to no modern exploration. From mine- to district-scale, the potential for resource growth and discovery is excellent.

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THE ARCHEAN MALARTIC GOLD DISTRICT - A CENTURY OF DISCOVERIES

Francois Bouchard, Senior Exploration Geologist, Agnico Eagle Mines Limited

Precious Metals

10:55 AM

A century after Wilbur Gouldie's gold discovery, the Archean Malartic gold district (Abitibi, Quebec) continues to grow under the Agnico Eagle banner. J.P. Norrie, pioneer and developer of the Malartic founding mines, would be impressed by the evolution and the potential of its former properties. This presentation will link past and present of the district through its pioneers, previous workers, discoveries, and the geology. The next chapter looks bright for Malartic.

THE GATHERING PLACE 1/1

CRITICAL RELATIONSHIPS: A CASE STUDY OF INDIGENOUS-LED MINERAL EXPLORATION

Sonia Molodecky (moderator), President, Brandon Smith, Project Liaison & Environmental, Cynthia Asp, Local Project Coordinator, and Tristan Asp, Environmental and Technology Apprentice, Global Indigenous Development Trust; Jerry Asp, CEO/Chair, Spirit Rock Resources Ltd.; Edgard Villanueva Cruz, CEO, Turtle Island Connection;

The Gathering Place 1/1

9:30 AM

This panel will share a case study in Tahltan Territory applying an Indigenous-led approach to mining that values Ancestral Knowledge and Ecosystem Services and brings together a cross-sector team including ecological economics, ecosystem services & science, geology and technology to support Tahltan Ancestral Knowledge. The panel will show process and tools on the ground to braid these distinct, yet complementary knowledge systems as applied to critical mineral exploration on two sites. We will hear from three generations of Tahltan participating in the project, highlighting the 50+ new jobs created for collaboration across knowledge systems. The case study seeks to establish critical relationships between the natural environment, Indigenous communities, and the mining sector.

THE APPLICATION OF INDIGENOUS KNOWLEDGE IN REGULATORY APPLICATIONS

Amber Chong, Technical Lead Engagement, Two Worlds Consulting

The Gathering Place 1/1

10:20 AM

In this presentation, we will explore the application of Indigenous Knowledge. We will highlight the importance of holistically including Indigenous perspectives into regulatory applications. This talk will offer a clear understanding of:

- Introduction and overview of Indigenous Knowledge and regulatory expectations
- Guiding principles to support the holistic application of Indigenous Knowledge
- The importance of early engagement, in the context of Indigenous Knowledge

Recognizing the importance of a multi-lens approach, we will invite Indigenous Nations to join this panel and share insights from our Indigenous technical leads, who bring a unique understanding to our work.

GEOSCIENCE INNOVATION

SUPER-TRACE TOTAL GOLD DETECTION LIMITS TO SUPPORT SUCCESSFUL GEOCHEMICAL EXPLORATION

Miguel Martinez, Senior Geochemist, ALS Global

Geoscience Innovation

1:30 PM

Recent research and development have considered the analysis of gold in geological materials at ultra-low detection limits, whilst maintaining a near-total recovery. The new approach incorporates hydrofluoric acid into the digestion process, along with a pre-concentration step and the use of sensitive ICP-MS instrumental analysis.

The technique can determine super-trace concentrations of gold (down to 0.02ppb) with high levels of accuracy and precision. Traditional fire assay determinations are often a very suitable option when gold concentrations are relatively high, and a total gold determination is required. Applications may include advanced or targeted exploration, project feasibility studies or mine site production. However, while fire assay can determine the total gold concentration in a sample, it cannot achieve ultra-trace detection limits. Alternative options, such as aqua regia and cyanide leaches can achieve ultra-trace detection limits and improved precision. However, these options may not fully recover and determine all the gold in a sample, such as in cases where the gold is occluded by silicate minerals.

Ultra-trace detection limits can offer exploration advantages by identifying the subtle, dispersed geochemical expressions of mineralised systems and being able to determine the true background in an area. When paired with relevant pathfinder elements, the ability to consider data well below average crustal abundance becomes a powerful exploration tool.

This work will present examples that show how ultra-trace determinations of gold and pathfinder elements like selenium and tellurium can improve exploration outcomes.

ADVANCING EXPLORATION THROUGH IVANHOE ELECTRIC'S DISRUPTIVE TECHNOLOGIES, TYPHOON™ AND COMPUTATIONAL GEOSCIENCES INC.

Mark Gibson, P.Geo. Chief Geophysics Officer, Ivanhoe Electric

Geoscience Innovation

1:50 PM

This presentation introduces Typhoon™, a cutting-edge geophysical survey technology owned by Ivanhoe Electric, and its integration with proprietary software from Computational Geosciences Inc. (CGI). Typhoon™ employs a high-powered electrical transmitter capable of both induced polarization (IP) and electromagnetic (EM) surveying, achieving industry-leading depth penetration – over 1.5 kilometers – while maintaining exceptional signal clarity in challenging environments. Designed to reduce exploration costs and accelerate project timelines, Typhoon™ has proven effective in identifying copper, nickel, gold, and silver-bearing sulphide minerals in areas with complex geologies and thick cover.

CGI complements Typhoon™ by using advanced inversion algorithms and machine learning tools to process vast geophysical datasets in 3D. As the only software capable of fully handling Typhoon's data spectrum, CGI's solution enables accurate subsurface imaging and efficient target identification. This integrated system has been successfully deployed at projects like the Santa Cruz Copper Project in Arizona, where it uncovered hidden mineralization, as well as in joint ventures with the Saudi Arabian mining company, Ma'aden, in the Arabian Shield region.

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The combined capabilities of Typhoon™ and CGI represent a transformative advancement in mineral exploration. This approach not only enhances data quality and survey speed but also reduces the risks associated with finding critical metals needed for global electrification efforts. Attendees will gain insights into how these technologies are reshaping exploration strategies and contributing to sustainable supply chains for electric metals.

PROSPECTING IN 2025: LESSONS LEARNED FROM FIVE YEARS OF EXPLORATION

Ryan Burke, Prospector & Geologist, Independent

Geoscience Innovation

2:10 PM

The role of the Yukon prospector has transformed significantly, shifting from rugged independence to a dynamic balance of intuition, regulation, and social responsibility. In "Prospecting in 2025," I explore this evolution and reflect on my journey navigating Yukon's mineral exploration landscape.

This presentation will trace the evolution of prospecting from its early days to today's reality, where staking a claim involves far more than pounding posts into the ground. I will highlight how programs like the Yukon Mineral Exploration Program (YMEP) empower prospectors to overcome financial barriers, supporting innovative approaches from concept to discovery while meeting growing expectations for responsible land stewardship.

This presentation delves into modern exploration strategies, including leveraging historical data, advanced methods, and hands-on fieldwork to identify high-potential targets. Drawing from five years of Yukon exploration, I compare independent prospecting efforts to those of junior mining companies and private explorers, illustrating how modern prospectors fuel economic growth through early-stage discoveries.

Attendees will gain insights into the challenges and opportunities in Yukon's exploration sector, understanding how prospectors are adapting to industry demands and shaping a prosperous future. Through this discussion, I aim to inspire a deeper appreciation of the evolving role of the prospector in driving innovation and development in mineral exploration.

APPLYING OIL AND GAS STRUCTURAL GEOLOGY TECHNIQUES TO MINING AND MINERALS

Manoel Valcarcel, Structural Geologist and Software Developer, PE Limited

Geoscience Innovation

2:30 PM

Subsurface structural geology uncertainty affects all stages of development of a resource. It is one of the greatest risks that must be addressed by the extractive industries. Structural geology workflow technology has long reduced risk in the exploration for, and production of hydrocarbons, which ultimately derisks operations. Despite its wide adaptability in any resource sector, the uptake of this technology in the metals and mining sector has traditionally been modest.

Recently, there has been new recognition of the importance of structural geology modelling in mining and minerals. For prospecting, regional understanding, shape of structures at depth, relationship between deformation events and mineralisation, all have inherent uncertainty that can be reduced with structural analysis. Following discovery, ongoing mine development, safety and efficient ore extraction are improved by reduced uncertainty in subsurface structures. Advanced structural analyses define structural evolution and previous structural configurations, helping understand, e.g. structurally controlled mineralisation.

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Two case studies are presented here to demonstrate some of the value from application of structural modelling workflows to mining projects.

1) Fracture characterisation, 3D restoration and geomechanical simulation of deformation events are used to predict strain-based natural fracture distributions, to aid mine expansion at an iron ore mine in Sweden. Validation of modelling results against measured data show that the main fracture clusters formed from a combination of (i) fault-parallel and shear fractures during a ~E-W extensional stress regime; (ii) joints and shear fractures during a ~N-S compressional stress regime; (iii) fractures sub-parallel to two diabase bodies which intersect the mine. Understanding of these patterns has been used to predict fractures and inform mine development.

2) Geomechanical forward modelling of fault-related deformation are used to predict Carlin-type gold mineralisation. Modelling results provided potential gold targets where high Coulomb stress changes due to fault-related damage coincide with high dilation tendency values near faults.

THE ART OF GEOSCIENCE

Esther Bordet, Geologist & Illustrator, Yukon Graphic Recording

Geoscience Innovation

2:50 PM

Geoscience is one way of questioning the world around us. Through research, experiments and observation, geoscientists are first-hand witnesses of change in the natural world. In the current context of environmental crisis, geoscientists have a social responsibility to communicate their findings to the widest possible audience. Ultimately this communication should help find solutions and suggest direction for our society.

Peer-reviewed journal articles and technical illustrations such as geologic maps allow for communicating data, theories and observations within the geoscience community. However, these methods rely on a technical language which is only understood by a small, specialized audience. In contrast, science illustration combines simple images and plain language text, allowing delivery of the message to a much wider audience.

There are many reasons why science illustration is so important:

- Geoscience is about observation and is fundamentally visual. In the geosciences, illustrations have the power to show what our eyes cannot see, such as the extinct, the incredibly large or small, or the evolution of a process.
- Science illustrations are an engaging, aesthetic way to communicate. They make complex science accessible by using quantitative data to inform, and value, qualitative observations.
- Visual stories are an integral part of our ancestral genetic heritage. Prehistoric cave paintings may be the most ancient form of expression and communication. Since Antiquity, natural science illustrations have also contributed to the dissemination of knowledge.
- The cognitive processes behind our perception and understanding of images as language are fascinating. While icons have a universal reach, other images may be interpreted differently depending on the individual's culture, education, and personal experience. The interpretation of an image is the result of all data received by the external senses. With the right balance of text, visuals and colours, science illustrations can clearly deliver a message almost instantaneously.

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OUTCROP TO ORBIT: LEVERAGING SPACE AND AI IN MINERAL EXPLORATION

Gerrit Olivier, Chief Scientist, Fleet Space Technologies

Geoscience Innovation

3:10 PM

The pace of mineral deposit discoveries is declining at a time when society urgently needs critical minerals for the transition to renewable energy. As shallow and easily accessible deposits are depleted, exploration efforts are increasingly focused on locating deeper, more complex deposits. Geophysics has become a cornerstone of this effort, enabling subsurface imaging in areas where traditional methods are insufficient. However, deploying these methods in the field is often expensive, time-consuming, and logistically challenging.

This talk introduces innovative approaches to mineral exploration that leverage advancements in geophysical sensing, edge processing, satellite connectivity, and artificial intelligence (AI). By integrating geophysical sensors with satellite communication systems and on-the-fly data processing, we enable rapid 3D imaging of the subsurface. This efficiency allows for real-time field decision-making, optimizing logistics and targeting efforts to achieve the best possible understanding of subsurface geology.

Our work spans multiple geophysical techniques, including ambient seismic noise tomography, magnetotellurics, natural source-field induced polarization, and gravity surveying. These methods are interconnected through a satellite-enabled system that processes data at the edge, providing actionable insights in near real-time. Once collected, the multiphysics datasets are ingested into AI algorithms trained on labeled datasets, such as drilling results, to predict the most promising exploration targets with high accuracy.

This fusion of space technology, geophysical innovation, and AI represents a seismic shift in mineral exploration. By significantly reducing the cost, complexity, and time required to evaluate the mineral potential of the subsurface, this approach offers a scalable pathway to discovering the critical resources needed for the global energy transition.

ROCK PROPERTIES AND GEOPHYSICS IN BC'S GOLDEN TRIANGLE

Dianne Mitchinson, Research Scientist, Natural Resources Canada (NRCan)

Geoscience Innovation

3:30 PM

With nearly half of Canada's copper production coming from British Columbia, the province is an obvious place to focus efforts to discover future copper resources supporting the electrification of Canada's economy. The 'Golden Triangle' mineral district of northwest BC represents a highly prospective geologic setting, an ancient volcano-magmatic arc environment often compared to the metal-endowed arcs of the modern southwest Pacific Ocean. The Golden Triangle district is host to the Red Chris copper and gold mine and features several other developed copper porphyry projects. The geology of this area is very challenging to map due to mountainous terrane, glaciers, and sedimentary cover. Geophysical methods thus have an important role to play in furthering the understanding of the area's geological history and mineralizing environments. This presentation summarizes initial results from an integrated geological and geophysical study representing a collaboration between the Geological Survey of Canada and the Geological Survey of British Columbia. Historic samples from the Golden Triangle district were measured to determine magnetic susceptibility, density, porosity, and electrical properties. This data reveals typical physical property ranges for stratigraphic units and rock types that may act as hosts to mineralization. At a regional scale, we investigate magnetic responses that are anomalous relative to expected responses and highlight some interesting structural features that may have influenced the existing geologic and structural framework of the Golden Triangle area. Future work will look at underlying mineralogical and textural factors

controlling geophysical responses and provide direction on how to fill gaps in knowledge. This work will support explorers planning, collecting, and interpreting geophysical data in the Golden Triangle, and will aid geoscientists in efforts to reconstruct the geological history in a very prospective, but geologically complicated and remote region.

CRITICAL MINERALS AND METALS IN BC MINE TAILINGS AND WASTE ROCK

Nicole D. Barlow, James R. Barlow, and Moretta Shuert, Purple Rock Inc.

Geoscience Innovation

3:50 PM

In 2024, Geoscience BC embarked on a multi-phase project to discover more about the critical mineral potential of mine tailings and waste rock from current and historical mining operations in British Columbia. Geoscience BC selected Purple Rock Inc, a geoscience consulting company, to investigate the wealth of public data available from the BC Geological Survey (BCGS) and the work of the BC Abandoned Mines Branch to characterize occurrences. Purple Rock Inc. used a critical minerals lens to create an inventory of existing geological, geochemical and supporting data about mine tailings and waste rock sources in BC.

Purple Rock has drawn together existing datasets characterizing mineral occurrences, geographic, environmental and infrastructure data. From these sources, we used key metrics to identify mines, deposits and occurrences with the highest critical mineral potential; these occurrences were the focus of a targeted document review to identify and describe related mine waste. The result of this phase of the project is a geospatial dataset containing the location and known characteristics of tailings and waste rock from more than 500 current and legacy mining occurrences with high potential for critical minerals, plus a dataset of information relating to an additional 2000 occurrences that may have mine waste of interest.

Transitioning to a net-zero emissions economy is driving innovative approaches to geoscience research, mineral exploration and development that can meet the demand for critical minerals and metals while also ensuring active environmental stewardship in the sector. This work highlights the critical mineral potential of mine waste and integrating environmental concerns, which provides industry, communities and Indigenous groups with key data to inform decision-making and guide actions around investment in critical mineral exploration and development.

MINING AND EXPLORATION AS AN ENGINE FOR ECONOMIC RECONCILIATION

Christy Smith, Senior Vice President, Indigenous Engagement and Human Environment and Michael McPhie, Executive Chairman and Founding Partner, Falkirk Environmental Consultants Ltd.

The Gathering Place 2/2

1:35 PM

This presentation, led by two experts in the field, provides an engaging discussion on how reconciliation principles are being incorporated into the design, environmental assessment, and development of mineral exploration and mining projects. By leveraging their extensive experience with projects in British Columbia, across Canada, and globally, the speakers will cover topics such as the transformation of major project assessments through Indigenous-led environmental assessments (EAs), and the role of economic reconciliation as a foundational element for many Indigenous communities. The session will highlight experiences in collaboration, shared processes, and respect for Indigenous stewardship principles. The integration of these practices into the design and assessment process ensures that projects are evaluated not only for their environmental impact but also for their alignment with cultural preservation and long-term community well-being, setting new standards for ethical, sustainable, and inclusive project development.

BUILDING CAPACITY: GEOSCIENCE IN ACTION FOR PEOPLE, PLANET & PROSPERITY

Doris Hiam-Galvez, Senior Advisor, Hatch Ltd.

The Gathering Place 2/2

2:40 PM

Designing Sustainable Prosperity empowers indigenous communities to build capacity with a vision that honors the next seven generations. By revealing untapped potential and reshaping planning processes, geoscience serves as foundation to co-design resilient systems that protect both people and planet. This approach enables communities to identify the future skills needed to support sustainable economic pillars. This session offers a forward-looking approach to sustainable, indigenous led prosperity.

THE NAK PROJECT: ADVANCING DISCOVERY OF A UNIQUE BC PORPHYRY

Neil Prowse, Project Geologist, American Eagle Gold

BC, Yukon & Alaska

9:05 AM

The NAK Project is located within the Eocene aged Babine Porphyry Belt of central BC. Drilling by American Eagle Gold over the past three seasons has revealed a large footprint of copper-gold mineralization, hosted within coarse sedimentary country rock and in multiple phases of intermediate to felsic dykes, within and adjacent to a central stock of Babine Plutonic Suite granodiorite. Mineralization at NAK is unique within the district, and is characterized by hypogene chalcopryrite, bornite, and chalcocite, as well as later-stage molybdenite bearing veining. The Babine Stock central to the NAK property is flanked by a pronounced annular chargeability high, related to a phyllic alteration halo, grading outwards from a central envelope of magnetite and biotite-bearing mafic potassic alteration. At least three separate phases of copper mineralized dyking have been logged from drilling to date, with unique geochemical signatures, that all post-date the Babine Stock granodiorite. Varied textural expressions of the intrusive phases has added complexity to the process of connecting the logged dyking. As such, significant work has focused on geochemical discrimination of the various intrusive phases, including PCA and U-map space plots, to more confidently aid the modeling. The NAK team is currently working towards a testable geology and alteration model, with an emphasis on integrating observational and geochemical data. This presentation will aim to familiarize the viewer with the NAK project and cover the methodology and results to-date of the on-going interpretive work at NAK.

IS GRADE KING? LEVERAGING METALLURGY TO MAKE EVERY OUNCE COUNT

Tony Reda, President & CEO, Tectonic Metals

BC, Yukon & Alaska

9:30 AM

In the mining industry, the phrase "grade is king" often dominates discussions about a project's value. However, at Tectonic Metals Inc., we challenge this conventional thinking, asserting that while grade is undeniably important, margin—driven by efficient metallurgy and cost-effective processing—truly determines success.

Discovering gold is a critical step, but the real prize lies in finding economic, high-margin gold. Profitability is the ultimate measure that transforms a discovery into a thriving mining operation. While high-grade and large deposits may make headlines, they don't guarantee success. Without the ability to extract gold efficiently and cost-effectively, even the most promising projects risk becoming uneconomical.

At Tectonic's flagship Flat Gold Project in Alaska, this philosophy is already taking shape. With a bulk-tonnage, free-milling, heap-leachable gold system, Flat presents a stark contrast to the nearby Barrick's and Nova Gold's 39 Moz refractory Donlin Gold Project. Early metallurgical testing at Flat has shown the gold's suitability for cost-effective recovery methods, including heap leaching.

Early metallurgical testing at Flat has been a game-changer. It has de-risked the project, optimized exploration strategies and provided invaluable insights into where and how to explore, all at a fraction of the cost of traditional exploration techniques like drilling.

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At Tectonic Metals, we are committed to finding an economic mine and confronting the major challenges of exploration head-on. By integrating metallurgy from the very beginning, we differentiate ourselves from other explorers, ensuring that every ounce of gold is unlocked to its full potential.

In this presentation, we will explore the interconnected roles of grade, margin, and metallurgy, demonstrating how the Flat project's early metallurgical work is advancing it toward both technical feasibility and economic viability, setting the stage for the project's long-term success.

CATCH: A NEW COPPER-GOLD PORPHYRY DISCOVERY IN YUKON, CANADA

Adam Coulter, VP Exploration, Austin Schneebeil, Project Geologist, and John Kelley, Project Geologist, Cascadia Minerals Ltd.

**BC, Yukon & Alaska/Core Shack
9:50 AM**

The 119 km² Catch Property is in central Yukon, 50 km southeast of the town of Carmacks, within the traditional territory of the Little Salmon Carmacks First Nation, in an underexplored part of the Stikine terrane – a key geological terrane which extends from the Golden Triangle in British Columbia into Yukon. It is immediately adjacent to the 1,000+ km long, deep seated, crustal scale strike-slip Teslin-Thibert fault. The Stikine Terrane is characterized by Late Triassic to early Jurassic volcanic-plutonic arc complexes that are well-endowed with copper-gold porphyries including the Red Chris, Schaft Creek, Kemess, KSM and Galore Creek deposits and mines.

The Property is mostly underlain by augite phyric basalt of the Semenof Formation, centered on a 7x3 km regional magnetic high. Copper-gold porphyry mineralization is associated with potassic to sericitic alteration of basalt, diorite, feldspar porphyry and gabbro and lesser intrusion breccias and hydrothermal breccias. Locally there is intense albitization, silicification, brecciation and up to 10% disseminated to semi-massive pyrite and chalcopyrite. Secondary copper minerals including malachite, azurite and tenorite are widespread at surface, coat fracture surfaces, and are often associated with gypsum.

Diamond drilling in 2024 was focused on stepping out from initial drill discoveries in 2023 at the Spark Zone and intersected significant copper-gold mineralization hosted dominantly in potassic to sericitc altered basalt and diorite. Highlight intercepts include 116.60 m of 0.31% Cu and 0.30 g/t Au in hole CA-23-002 and 106.00 m of 0.37% Cu and 0.22 g/t Au in hole CA-24-006. Drilling has not yet intercepted significant potassic alteration, suggesting potential to discover higher copper-gold grades associated with the potassic core of the system.

Mineralization at Catch is open in all directions and represents the discovery of a new greenfield at surface copper-gold porphyry system with district-scale potential in an underexplored part of Yukon.

DISCOVERY OF THE SUPERCELL-1 HIGH-GRADE GOLD DOMAIN

Kenneth Konkin, P.Geo., President & CEO, Tudor Gold Corp.

**BC, Yukon & Alaska
10:15 AM**

Tudor Gold's flagship Goldstorm Deposit is a large copper-gold-silver porphyry exploration project located in the Golden Triangle region of northwestern British Columbia, Canada. An updated mineral resource estimate released on February 20, 2024, resulted in 27.9 million ounces of indicated gold equivalent (AuEQ), with an additional 6.0 million ounces of inferred AuEQ. The project is located immediately northeast of Seabridge Gold's KSM Project, and immediately north of Newmont's

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Brucejack Deposit. The project is currently rapidly advancing towards a Preliminary Economic Assessment (PEA). The Deposit remains open along strike and at depth warranting further exploration.

During the 2023 exploration season, while expanding known mineralization within the Goldstorm Deposit, several high-grade intercepts aligned indicating the possibility of a high-grade, oblique, late-stage quartz-carbonate-sulfide breccia structure emanating from the main porphyry intrusive body of the Goldstorm Deposit. The new high-grade structure was discovered and subsequently termed Supercell One (SC-1). The 2024 exploration season was designed to continue expanding the porphyry style mineralization, while also attempting to solidify the presence of, and expand upon the newly discovered SC-1 target. The 2024 exploration season was extremely successful in that three additional sub-parallel SC-1 structures were discovered bringing the total to four structures that now make-up the SC-1 System. Upon reviewing all technical data from the SC-1 intercepts, the leading candidate for mineralization style is a late stage intermediate sulfidation epithermal overprint to the underlying Goldstorm Porphyry Deposit. This discussion will explore the technical characteristics of the SC-1 discovery as well as the potential implications on the project moving forward.

UPDATE ON THE 3TS GOLD-SILVER PROJECT

Andy Randell, Principal Geoscientist, SGDS Hive / Independence Gold Corp.

BC, Yukon & Alaska/Core Shack
10:35 AM

Independence Gold Corp.: The 3Ts Project is a highly prospective gold and silver exploration project located on the Nechako Plateau west of Prince George in central British Columbia. Exploration has revealed significant gold and silver mineralization hosted in several epithermal quartz veins across the site. Independence Gold has made notable progress in advancing the project, including the recent shift towards calculating a new, robust resource calculation.

Recent fieldwork, including geological mapping, trenching, and drilling, has led to the discovery of new mineralized veins and targets, further expanding the project's potential. The company has been successful in identifying high-grade gold and silver intersections, demonstrating the significant exploration upside in the area. With an aggressive drill program planned for the upcoming season, this update will focus on the exciting discoveries made to date, the transition to a new resource estimate, and the next steps in advancing the 3Ts Project toward development.

AME H.H SPUD HUESTIS 2024 AWARD RECIPIENT

Scott Berdahl, CEO, Snowline Gold

BC, Yukon & Alaska
11:00 AM

TURNING CHALLENGE INTO DISCOVERY: KEY GEOLOGICAL CONSIDERATIONS FOR SUCCESSFUL AU-CU AND CU-AU PORPHYRY EXPLORATION IN THE TOODOGGONE DISTRICT.

The Toodoggone district has been explored for over 75 years and scores of epithermal and porphyry prospects have been discovered, including significant deposits that became mines at Kemess South, Lawyers and Baker. Amarc Resources began exploring the JOY project in 2017 and recent funding from Freeport McMoRan Mineral Properties Canada Inc. has accelerated exploration. In 2022 Amarc discovered the blind Canyon porphyry Cu-Au deposit, significantly expanded the Pine porphyry Au-Cu deposit, identified advanced argillic alteration in the Northwest Gossan target, and intersected high-level auriferous porphyry alteration at the Twins and South Mex targets. This presentation discusses implications for porphyry exploration in the Toodoggone by comparing JOY deposits and targets, including the Northwest Gossan to the Kemess deposits.

Variations in magmatic-hydrothermal paleodepth may account for many differences between Toodoggone deposits and prospects and bears directly on interpretation of geophysical, geochemical and geological patterns for exploration. The Canyon discovery intersected 296 m grading 0.30% Cu, 0.14 /t Au and 1.7 g/t Ag, exclusively hosted by Lower Toodoggone Fm dacitic crystal tuff with strong potassic alteration related to quartz-magnetite-sulphide veins. Interestingly, Canyon has Au/Cu of only ~0.5:1, which differs markedly from ratios of ~2->3:1 that characterize most Toodoggone porphyries. At the Au-rich Pine deposit, well-mineralized sericite-pyrite alteration is telescoped onto early, mineralized potassic alteration. The Northwest Gossan target, which is being drilled for the first time in 2024, is dominated at surface by widespread quartz-sericite/chlorite-pyrite (QSP) alteration but spectral analysis also reveals widespread pyrophyllite-dickite advanced argillic alteration. Drillholes at the Twins and South Mex targets intersected QSP and propylitic alteration, respectively, with elevated Zn±Ag±Au, similar to material above Kemess East. All deposits and targets at JOY are cut by near-vertical, northwest-trending, late-mineral porphyry dykes of the Black Lake Intrusive Suite but pre- to syn-mineral plutons have not been identified. In contrast, mineralization in the Kemess deposits is hosted by potassic alteration within and immediately surrounding older Black Lake plutons that cut Takla Group volcanic rocks that underlie the Toodoggone Fm.

At JOY, mapping of QSP alteration and IP surveys have identified 13 sulphide-rich target areas that can exceed 20 km² in size. Exploration strategy is focusing on approaches to vector and better site drilling within these anomalies, which includes evaluation of paleodepth as a guide to potential targets at depth. Pending results from a large 2024 drilling program at JOY should significantly augment our evolving interpretations and potential Toodoggone-scale applications.

NAK PORPHYRY

The Nak Project is in the Babine porphyry Cu belt in central BC. The mineralizing system is hosted by rocks as young as Eocene that were faulted, tilted, and intruded by coeval intrusions of the Eocene Babine suite. The intrusions are closely associated with porphyry mineralization and are part of a north-northwest trending belt that includes those at the Granisle and Bell mines, and at the Morrison and Hearne Hill deposits.

The Nak Project and Babine region are characterized by widespread till cover, and so the geology is inferred between sparse outcrops and drill holes. Drilling shows a thick ENE-dipping sequence of Paleocene to Eocene(?) sedimentary and minor volcanic rocks unconformably overlying an older, generally fine-grained sedimentary sequence, with both intruded by numerous dikes and stocks that include, in order of decreasing relative age: dioritic sills and dikes, inter-mineral (hornblende) biotite-feldspar porphyry dikes, and related equigranular intrusions of the “Babine porphyry stock”, acicular hornblende±K-feldspar porphyry dikes, high-K dikes containing Cu sulphides in miarolitic cavities, and syn- to post-mineral felsic biotite-feldspar porphyry dikes. Very recent drilling has intersected extensive crowded to seriate-textured feldspar porphyry intrusions hosting abundant disseminations, seams and veinlets containing bornite, chalcocopyrite and chalcocite that may be coeval with later phases.

Chalcocopyrite and bornite are the primary minerals of potential economic significance, with local chalcocite and sulphosalts also present. Mineralization is porphyry-related, and includes quartz stockwork, zones of more widely spaced sulphide-dominant veins, zones of disseminated sulphide in conglomerate or in intrusions, and sulphide in miarolitic cavities. Molybdenite is present locally with with Cu sulphides. Potassic alteration (pervasive biotite-magnetite- K-feldspar) is associated with Cu-Au mineralization and grades westward into propylitic (chlorite-albite-pyrite, local chalcocopyrite-pyrrhotite) alteration. Later phyllic and argillic alteration, often carbonate-rich, occurs in crosscutting zones and preferentially in certain intrusions, including the seriate-textured variety in the north.

PERSEUS ZONE, KUKAMAS PROPERTY: KAMBALDA-TYPE KOMATIITIC NICKEL IN QUEBEC

Jean-Marc Lulin, President and CEO, Azimut Exploration Inc.

The Kukamas Property, located in the James Bay region of Quebec, covers 41 km of a highly prospective greenstone belt. Kukamas is subject to an option agreement with KGHM International Ltd, and Azimut is the operator.

Kukamas was staked in 2019 following regional-scale predictive modelling for copper. Modelling for nickel identified additional targets on the property in 2022. A high-resolution magnetic and VTEMPlus survey flown in 2023 (3,199 line-km) confirmed multiple nickel targets that combined EM, magnetic, and geochemical footprints. Prospecting in 2023 and 2024 resulted in the discovery of nickel-copper-PGE showings, including the high-grade Perseus Zone. A maiden drill program was initiated in November 2024.

The Perseus Zone is associated with an ultramafic volcanic unit, with features indicating a highly fertile system. Notable results from channel sampling include 2.98% Ni, 0.32% Cu and 2.25 g/t PGE over 8.0m. Sawed rock samples returned up to 9.35% Ni, 3.04% Cu, 3.78 g/t Pt and 8.99 g/t Pd.

The mineralization consists of semi-massive to disseminated sulphides, mostly pentlandite, pyrrhotite and chalcopyrite, hosted in ultramafic rocks, likely komatiitic volcanics and peridotite. The sulphide-rich mineralization occurs as a matrix in brecciated rocks and as veinlets. The curvilinear shape of the zone may correspond to an embayment at the base of the ultramafic flow, a shape often observed in komatiitic nickel deposits. Similarities with Archean Kambalda-type deposits are further suggested by the high MgO contents in the rocks proximal to mineralization, high Ni/Cu ratios and high Pd/Pt ratios in 38 mineralized samples (>0.3% Ni).

The Perseus discovery at Kukamas and the W1 discovery on the Wapatik Property validate Azimut's predictive modelling for nickel at the scale of the James Bay region (174,208 km²). The company's JBN Project (3,663 claims, 109 claim blocks) controls ~200 comparable modelled targets.

BANYAN GOLD

AURMAC: COUNTRY ROCK HOSTED INTRUSION RELATED GOLD SYSTEM

James Thom, Project Manager and Keagan Parry, Senior Geologist, Banyan Gold

Located 35km north of Mayo, central Yukon, the AurMac property is a country rock hosted intrusion related gold system. An updated mineral resource for the AurMac property of 7 million ounces of gold was announced on Feb 7, 2024. The mineral resource is contained in two near/on-surface deposits: the Airstrip and Powerline Deposits.

The Airstrip deposit is hosted within the Sourdough Hill Member of the Keno Hill Quartzite Formation (359 – 323 Ma) and the Powerline deposit is hosted in the Hyland Group sediments (635 – 542Ma) that are thrust onto the Keno Hill Quartzite Formation.

Gold mineralization is associated with pyrrhotitic retrograde skarn-like alteration, quartz-sulfosalt-arsenopyrite-pyrite veins, and locally with siderite-base metal veins and breccias.

Retrograde calc-silicate alteration with pyrrhotite and gold: Shear and contact metamorphic-induced calc-silicate altered calcareous sediments contain abundant pyrrhotite (locally in massive bands) along low angle shear planes and later veins and fractures. Pyrrhotite forms >99% of the sulphide mineralization associated with the calc-silicate alteration, with minor/trace amounts of chalcopyrite, pyrite and sphalerite. Scheelite is also common in the pyrrhotitic rich horizons.

Quartz-Sulfosalt-Arsenopyrite-Pyrite+/-Gold Veins: Tend to occur in clusters of dilatant zones which have a westerly to south-westerly strike; the dip of the veins is commonly shallow to the north. The veins typically range from 5 to 20 mm in thickness. Scheelite is also common in veins.

Siderite-Galena-Sphalerite+/-Arsenopyrite+/-Gold Veins/Breccias: These veins and vein breccia zones are similar to those described in the Keno Hill silver district and are siderite-healed brittle fault zones with coarsely crystalline galena and marmatite sphalerite.

We will be showcasing 2024 drill-core with visible gold, cross-sections from each deposit, and examples of the 3 styles of gold mineralization found at AurMac.

HIGH LAKE BELT: NUNAVUT'S NEXT BELT: GOLD AND VMS POTENTIAL

Trish Toole, Jaida Lamming, Emily Wiggins and Darren Lindsay, Blue Star Gold Corp.

The High Lake greenstone belt, located in the Kitikmeot Region of Nunavut, is a complex, northerly trending Archean volcano-sedimentary terrane. The belt is divided into three structurally controlled geological domains. The Western domain (2705-2695 Ma), bounded to the east by the Kennarctic Shear, is felsic volcanic dominated and characterised by numerous polymetallic occurrences. The Eastern domain (2671 Ma) contains felsic to mafic volcanic rocks and is bounded to the west by the Thunder Break structure. The Central domain (2616-2612 Ma) is dominated by sedimentary rock with lesser mafic volcanic sequences and characterised by gold-arsenic occurrences.

Blue Star is advancing two major projects in the High Lake greenstone belt: the Ulu Gold Project, which includes the high-grade Flood Zone deposit (Central domain), and the Roma Project which straddles the Kennarctic Shear (Western & Central), host to both gold and base metal targets. Notably, the Roma Project encompasses the newly discovered Ataani VMS lens and the prospective Auma gold target.

The Ataani Target, a blind discovery by Blue Star in 2024, was identified using a fixed loop EM system and subsequent drilling, outlining a ~300m by ~250m massive sulphide body.

Discovery drill hole DD24-HII-001 returned grades of:

17.1 m of 0.42% Cu, 1.43% Zn, 0.03% Pb, 9.19 g/t Ag and 0.13 g/t Au.

- including 2.0 meters of 0.08% Cu, 10.95% Zn, 0.11% Pb, 4.33 g/t Ag and 0.12 g/t Au and 3.5 meters of 1.46% Cu, 0.15% Zn, 0.01% Pb, 25.68 g/t Ag and 0.293 g/t Au.

Blue Star's flagship asset is the high-grade Ulu Deposit, with 572,000 ounces gold (2.535 MT @ 7.02 g/t) measured & indicated, and 303,000 ounces gold (1.283 MT @ 7.34 g/t) inferred, collectively within three zones: the Flood Zone, the Gnu Zone and the NFN Zone.

* The independent and qualified person for the Mineral Resource Estimate is Chris MacInnis, P.Geo. (#2059) from ALS-GoldSpot Ltd.; "Technical Report on the Ulu Gold Project, Nunavut, Canada", February 22, 2023.

THE THORN PROJECT: AN EMERGING PORPHYRY-EPITHERMAL DISTRICT

Corey James, Brixton Metals Corp.

The Thorn Project located in northwestern BC, hosts a district-scale, Triassic to Eocene, volcano-plutonic complex and related sedimentary units with several styles of mineralization related to porphyry and epithermal environments. Brixton Metals is actively exploring along this district scale trend and the 2021 to 2024 drill campaigns have resulted in Brixton's most significant drill intercepts to date on both its Camp Creek Cu-Au-Ag-Mo porphyry target and Trapper Gold epithermal target.

Camp Creek is a blind Cu-Au-Ag-Mo porphyry target that has been the focus of Brixton's drilling since 2011. Recent drill testing has pushed holes beyond 1,000m depths and has encountered open ended porphyry mineralization including 967.71m of 0.25% Cu, 0.09g/t Au, 2.39 g/t Ag and 186 ppm Mo (0.39% CuEq*) in THN22-201. Brixton continues to test the extents of this porphyry system, at depth and towards the northwest, northeast and southeast.

The Trapper Gold target consists predominantly of volcanic and volcanoclastic rocks of the Upper Triassic Stuhini Group, which are intruded by Cretaceous quartz diorite, interpreted as part of the Thorn Magmatic Suite. Gold mineralization is observed within structurally controlled quartz-carbonate stockworks and epithermal veins that host sulphides (pyrite, galena, sphalerite) and rare occurrences of visible gold. To date, 76 holes have been drilled at the Trapper target, including multiple holes with visible gold. High-grade intercepts include 64m of 5.74 g/t Au in drill hole THN22-205, and 47m of 1.10 g/t Au in drill hole THN22-206.

Key geological insights taken from drilling, the use of oriented core, SWIR, litho-geochemistry, and geophysical rock properties (magnetic susceptibility, conductivity) have all contributed to drill targeting and expanding Brixton's district scale potential. Drill core and rock samples will showcase the styles of mineralization and key geological features from both the Camp Creek and Trapper targets.

CANTERRA MINERALS CORPORATION

BUCHANS VMS: LUNDBERG SULPHIDE DEPOSIT – FOOTWALL STOCKWORK MINERALIZATION TO THE HIGH-GRADE LUCKY STRIKE INSITU VMS DEPOSIT, NEWFOUNDLAND

Paul Moore, David Butler and Konrad Chrzastowski, Canterra Minerals Corporation

The Buchans VMS mining camp, located in central Newfoundland, Canada, is among the world's highest-grade VMS (volcanogenic massive sulphide) camps. Host rocks consist of bimodal, (~571 Ma) felsic-dominated volcanic rocks of the Buchans Group, a peri-Laurentian continental arc-sequence within the Appalachian Orogen.

Owned and explored by Canterra Minerals, the Buchans Project features the Lundberg Deposit, a large, near-surface VMS stockwork sulphide resource located beneath and adjacent to the historic Lucky Strike orebody.

Lucky Strike, historically mined by Asarco, produced 5.6 million tonnes of ore with exceptional grades: 18.4% Zn, 8.6% Pb, 1.6% Cu, 112 g/t Ag, and 1.7 g/t Au. Overall, the Buchans Mine yielded 16.2 million tonnes of ore at average grades of 14.5% Zn, 7.6% Pb, 1.3% Cu, 1.37 g/t Au, and 126 g/t Ag from five orebodies.

The Lundberg Deposit hosts:

- **In-pit Indicated Resources:** 16.79 million tonnes grading 1.53% Zn, 0.64% Pb, 0.42% Cu, 5.69 g/t Ag, and 0.07 g/t Au (156M lbs Cu, 566M lbs Zn, 237M lbs Pb, 3.1M oz Ag, 37K oz Au).
- **In-pit Inferred Resources:** 380,000 tonnes grading 2.03% Zn, 1.01% Pb, 0.36% Cu, 22.35 g/t Ag, and 0.31 g/t Au (3M lbs Cu, 17M lbs Zn, 9M lbs Pb, 270K oz Ag, 38K oz Au).

Unlike the historically mined Zn-Pb dominant orebodies, the Lundberg Deposit contains a higher proportion of Cu to other metals and a higher proportion of pyrite relative to other sulphides compared to previously mined massive sulphides.

Recent drilling by Canterra focused on the Lundberg stockwork sulphide zone to expand the zone and better define the internal distribution of Cu within the stockwork zone. Displayed cores highlight higher-grade mineralization and textures found within this system including barite.

CASSIAR GOLD CORP.

EXPLORATION ADVANCES AND OPPORTUNITY IN THE CASSIAR GOLD DISTRICT

Jill Maxwell, VP Exploration and Aedan O'Brien, Sr Project Geologist, Cassiar Gold Corp.

The Cassiar gold district in northern British Columbia lies along a belt of orogenic gold deposits that includes the Cariboo, Barkerville, and Sheep Creek districts. The camp is hosted by the Sylvester Allochthon, composed of stacked, shallowly dipping panels of Paleozoic to early Mesozoic mafic volcanic rocks, ultramafic sills, and siliciclastic sediments. Regional Jurassic to Mesozoic deformation is associated with auriferous gold veins in the district.

Gold-bearing quartz veins occur in stacked mafic volcanic panels along a 15 km corridor, controlled by low-angle thrust faults localized along weaker listwanite and sedimentary horizons. This corridor is concordant with the dominant lineation trend representative of the transportation direction of thrust faults. Auriferous veins form perpendicular to this trend.

Mineralization style varies across the property. The Cassiar South project area hosts multiple high-grade deposits, with 350,000 oz of past production. Mineralization is associated with quartz-carbonate veins occurring beneath ultramafic

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sheets or stepped downward within mafic volcanic panels, commonly at deflections of lithological contacts. Mineralized veins include minor sulphide mineralization, commonly with visible gold.

The Cassiar North project area hosts the near-surface, bulk-tonnage Taurus deposit with a 1.4-million-ounce inferred resource at 1.14 g/t gold, and several regional targets with bulk-tonnage potential. The Taurus deposit and outlying prospects are characterized by narrow sheeted quartz-carbonate vein sets hosted in gently-dipping mafic volcanic rocks, with disseminated pyrite-carbonate alteration halos forming bulk mineralized zones and higher-grade corridors proximal to veins. Recent drilling extended near-surface and higher grade mineralized trends along significant mineralizing corridors at Taurus. Regional drill holes identified new gold-bearing quartz veins and confirmed the presence of bulk-tonnage style mineralization at targets with satellite deposit potential.

Historical exploration largely focused near past-producing mines, leaving significant target potential including lateral vein extensions, new internal high-grade corridors within bulk mineralized zones, and discovery of new parallel and stacked vein systems.

THE COLPAYOC GOLD-COPPER PORPHYRY PROJECT, PERU

Keith A. Laskowski and Julio Casteñeda, Copper Standard Resources Corporation

Copper Standard Resources (“CSR”) is seeking new copper-gold deposits and has established an Option to acquire a 100% interest in the Colpayoc Cu - Au property, located in the Miocene Cajamarca Porphyry – Epithermal Mineral District in northern Peru, adjacent to the Yanacocha District, Department of Cajamarca. The Cajamarca District hosts 14 porphyry deposits including Tantahuatay, Minas Conga, Michiquillay and Cerro Corona, and about 19 epithermal gold deposits including the Yanacocha District.

The Colpayoc Property contains an outcropping, oxidized, porphyry gold-copper system at the Daylight Zone. Mineralization occurs within two intrusive phases of a nested intrusive complex, with classic sheeted stockwork vein systems hosted mainly within sericite-quartz pyrite alteration. The Miocene intrusive complex is hosted in Cretaceous carbonate and clastic sedimentary rocks which also host adjacent, related, skarn and lead-zinc-silver (manganese) replacement mineralization.

Colpayoc has an historic inferred gold resource of 19.9 million tonnes grading 0.48 grams per tonne gold, containing 305,000 ounces of mainly oxide gold mineralization in the Daylight Zone (0.25 gram per tonne cut-off grade) which is open in three directions for expansion. Historic drilling was shallow, but Copper Standard completed 14 holes in 2024 which expanded the oxide zone and is exploring the primary sulfide mineralization at depth. Copper grades are low in the oxide but reach up to 0.4% in the mixed sulfide zone.

The Daylight Zone mineralization remains open to the south, north and west and likely connects with the Montura Zone located 600 meters to the south. The mineralization may extend to similar gold targets located about 600 meters to the north, defining a +2.0-kilometer-long trend of potential mineralization. Copper Standard has recently completed an extensive, deep, dipole-dipole induced polarization survey. Results are being integrated with drill results and geology to identify priority primary porphyry gold-copper targets at depth.

THE BLUE PROPERTY: AN EMERGING POLYMETALLIC DISTRICT IN NORTHWEST, BRITISH COLUMBIA

M. Barrington, Vice President of Exploration, and S. Porter, Senior Project Geologist, Core Assets Corp.

The Blue Property contains three defined projects where multiphase porphyry stocks have intruded metamorphosed passive margin stratigraphy. The Eocene Silver Lime Project, located at the centre of the Property, is considered highly prospective for copper, molybdenum, zinc, silver, lead and gold and is bound by two older copper-bearing porphyry-skarn occurrences. The Silver Lime Project contains evidence of full spectrum mineralization typical of large, world-class deposits that evolved outward from the centralized Mo-Cu-Ag porphyry at the Sulphide City Target and Fe-Zn-Cu massive sulphide skarn to more distal Ag-Pb-Zn-Cu-Au carbonate replacement mineralization and epithermal vein showings within an impressive 9.5x10 kilometer mineralized footprint.

In 2024, drilling at the Whaleback Target returned the longest and highest-grade Fe-Zn-(Cu-Ag) massive sulphide skarn intercepts to-date. Drillhole SLM24-060 returned 10.5m of 7.8% Zn, 0.25% Cu and 10g/t Ag within 39.9m of 2.5% Zn, 0.13% Cu and 5.1g/t Ag, whereas hole SLM24-061 returned 11.78m of 10.6% Zn, 0.36% Cu and 16g/t Ag from surface. The Whaleback Zinc Skarn forms a 250m long surficial trend with high-grade Ag-Pb-Zn-Cu skarn mineralization at the Gally Target that graded 139g/t Ag, 3.5% Pb+Zn and 0.18% Cu over 8m from surface in 2023. Recent drilling indicates continuity of this high-grade trend below Whaleback to at least 120m depth.

Newly acquired oriented drill core data and detailed structural mapping completed in 2024 indicate that the main Silver Lime system dips westerly and has mineralized the surrounding stratigraphy in a brittle, post-collisional setting. Anomalous Cu-Mo-Ag grades were intersected at the Sulphide City Porphyry Target in 2024, indicating the presence of a Cu-bearing porphyry system below 600m that is open for exploration.

HIGH-GRADE GOLD EXPLORATION BY DRYDEN GOLD CORP IN NORTHWESTERN ONTARIO

Maura Kolb, President and Anna Hicken, Vice President of Exploration, Dryden Gold Corp.

Dryden Gold Corp is a junior explorer targeting high-grade gold with district scale potential in Northwestern Ontario. Dryden Gold Corp began publicly trading on the TSX-V under the symbol DRY in January of 2024 and trading on the OTCQB in the summer of 2024 under the symbol DRYGF. The Company has a large 70,000-hectare property with brownfields and greenfields exploration targets. The Dryden District, within the Wabigoon Greenstone belt, is located south of the prolific Red Lake Camp (Uchi greenstone belt) and north of the Rainy River gold mine. The area has seen very little exploration and geological research although it hosts many similarities to the neighboring Red Lake Camp and the Timmins Mining Camp.

Dryden Gold has been drill testing their brownfields project area called the Gold Rock Camp. There are three zones within the Gold Rock Camp: Elora, BM1 and BM2. These mineralized zones are parallel to a major regional, northeast trending, D2 gold bearing shear zone called the Manitou Dinorwic Deformation Zone (MDdz). The high-grade zones within this target area appear to be controlled by the intersection of this D2 structure with the older, more east-west trending D1 structures. Drill highlights from the Company's 2024 drill program include hole KW-24-024 returning 8.93 g/t gold over 12.45 meters including 32.96 g/t gold over 2.73 meters and hole KW-24-017 returning 30.72 g/t gold over 5.70 meters including 313.00 g/t gold over 0.55 meters.

Dryden Gold has large-scale district potential with a robust project pipeline for further exploration growth and currently has no mineral resources or reserve statements on the property.

ELIDA PORPHYRY CU-MO-AG DEPOSIT

Richard Osmond (P.Geo.), Manuel Montoya, Juan Huamán, and Elmer Quivio, Element 29 Resources Inc.

The Elida porphyry Cu-Mo-Ag deposit occurs along the east side of a large block of 29 contiguous concessions totaling 19,749 hectares that are 100% owned by Element 29 Resources Inc. The project is in west-central Perú roughly 200 km north of the capital city, Lima. The project is situated at a moderate elevation roughly 1,600 metres with access to transportation routes to coastal shipping ports and power infrastructure.

The Elida porphyry complex is a Cu-Mo-Ag mineralized multiphase porphyry system with a 2.5 x 2.5 km hydrothermal alteration footprint at surface, associated with Eocene-aged quartz monzonite stocks, emplaced into the Cretaceous volcano-sedimentary sequence and a granodiorite member of the Peruvian Coastal Batholith. Elida is one of the first Eocene-age mineralized porphyry systems discovered in Peru.

Previous drilling by Element 29 intersected multiple, long intervals of porphyry Cu-Mo-Ag mineralization which has been traced to a depth of greater than 900 m where it remains open. Most of the Cu-Mo mineralization is carried in A-type veins (quartz-pyrite-chalcopyrite-molybdenite) that were formed during the waning stages of potassic alteration, with a significant secondary amount of Cu mineralization carried in later E-type veins (chlorite-epidote-pyrite-chalcopyrite-magnetite).

Based on 14,361.4 meters of diamond drilling, Element 29 completed an independent pit-constrained Inferred Mineral Resource Estimate which outlined 321.7 million tonnes of 0.32% Cu, 0.029% Mo and 2.61 g/t Ag at a 0.2% Cu cut-off grade and a 0.74:1 strip ratio. The Mineral Resource Estimate information is available in “NI 43-101 Technical Report, Mineral Resource Estimation of the Elida Porphyry Copper Project in Perú” dated September 20, 2022, and prepared in accordance with Form 43-101F1 by Marc Jutras, P.Eng., M.A.Sc., Ginto Consulting Inc.

A Phase 3 diamond drill program is ongoing and is designed to potentially expand the existing pit-constrained Inferred Mineral Resource Estimate and increase the overall Cu-Mo-Ag grades.

RELIANCE EPIZONAL OROGENIC GOLD-ANTIMONY DISCOVERY, BC, CANADA

Robert T. Boyd and Darren O'Brien, Endurance Gold Corporation

Endurance's Reliance Gold Project is a new surface discovery located 4 km east of Gold Bridge, BC and 10 km northeast of the Bralorne-Pioneer Gold Mining Complex, BC's largest historic gold producer of over 4 million ounces gold. The Project is a 4-hour drive north of Vancouver and can be accessed year-round by all-weather road.

Surface channel sampling recognized the potential in 2020 with highlights of 5.80 gpt gold over 31.5 m in historic road cuts. Reliance is an "Epizonal" Orogenic gold-antimony system. Active drilling has defined excellent intersections over 1,500 m of strike and 1,000 m vertically in the regional-scale Royal Shear structural complex. Mineralization is open to expansion with surficial sampling indicating potential over a total of 2.5 km. In addition, at least four other undrilled parallel structures on the Reliance property have returned high-grade gold values (up 24 gpt gold) indicating potential to significantly expand this emerging Epizonal Orogenic gold camp.

Endurance has completed 192 drill holes for a total 31,252 m in both reverse circulation and diamond drilling. 108 diamond drill holes have been completed with 25,206 m drilled through 2024. 97 of the drill holes have assay results. Of those holes, 65% have returned significant gold results exceeding 10 gram X metres with 16 of these with excellent drill intersections between 63 and 426 gram X metre. Highlight intersections include; 15.7 gpt gold over 24.8 m (incl 26.96 gpt gold over 4.1 m); 12.85 gpt gold over 12.9 m; 8.41 gpt gold over 12.0 m; 8.98 gpt gold over 9.3 m; 8.06 gpt gold over 13.5 m; and 5.8 gpt gold over 23 m.

Mineralization is associated with stibnite, arsenopyrite and fine native gold in a brittle deformational environment in mafic volcanics. Key mineralization style is laterally continuous tabular multiphase cataclastite breccia associated with intense iron-carbonate sericite alteration and late pulses of coxcomb epizonal-type quartz.

FARADAY COPPER

COPPER CREEK, ARIZONA – DISCOVERY OF NEW NEAR-SURFACE BRECCIA AND VEIN-HOSTED COPPER MINERALIZATION.

Thomas Bissig, Paul Harbidge, Dante Padilla, Benedek Gál, and Zach Allwright, Faraday Copper

The Copper Creek Project, endowed with over 4.2 Blbs Copper Measured and Indicated Mineral Resources, is one of the largest undeveloped copper deposits in North America. It is characterized by unique mineralization styles including high-grade breccias with local occurrence of semi massive to massive sulphide, as well as early halo veins. Recent drilling has led to the discovery of significant new near-surface mineralization including the Banjo and Prada breccias and Area51.

The Project is situated in the heart of the Laramide Porphyry Copper Province of the Southwestern U.S., in the Galiuro Mountain range, 70 km north-east of Tucson, Arizona. The Copper Creek batholith, porphyries and breccias (~63 to 61 Ma) were emplaced in the hanging walls of northwest trending Laramide thrust faults, commonly near the intersection of east-to-northeast trending extensional faults inherited from the Precambrian basement. The thrust faults were later reactivated as normal faults during Miocene Basin and Range extension. This structural arrangement divides the district into segments with different levels of exhumation.

Hydrothermal breccias overprint early halo veins and magmatic-cupola style mineralization with miarolitic cavities and unidirectional solidification textures. Breccias are typically 80 m to 250 m across and can have a vertical extent of over 1,000 m. They mostly contain angular clasts cemented by variable proportions of quartz, muscovite, tourmaline, carbonate and sulfides. Clastic matrix is subordinate. Quartz-coarse sericite alteration is commonly associated with high-grade breccia hosted mineralization.

Core on display will include samples from the recently discovered Banjo breccia, Area51 (which has epithermal characteristics) and the Keel zone (which represents a deep portion of the mineral system). In addition, representative samples for other mineralization styles including, massive sulphide, early halo style mineralization and miarolitic cavities will be on display.

FIREWEED METALS

EXPANDING THE MACPASS CRITICAL METALS DISTRICT: FIREWEED METALS DISCOVERS NEW POPCORN ZONE AND EXTENDS MINERALIZATION AT BOUNDARY ZONE DURING 16,000 M 2024 DRILL PROGRAM

Kaitie Purdue, Project Geologist (GIT), Fireweed Metals

Fireweed Metals is excited to present core drilled at the Macpass Zn-Pb-Ag (Ga-Ge) Project from the Boundary Zone and Tom deposits as well as our new discovery at the Popcorn target. The Macpass Project covers three distinct sedimentary rock-hosted, stratiform Zn-Pb-Ag deposits, Tom, Jason, and End Zone, and one deposit containing brecciated, stratiform, and vein-hosted Zn-Pb-Ag mineralization at Boundary Zone. These deposits are mainly hosted within the Portrait Lake Formation of the Devonian Earn Group, while mineralization at Boundary Zone spans a wider stratigraphic interval.

Step-out drilling west of Boundary Zone successfully intersected vein and replacement-style mineralization as well as massive sulphides up to 160 m from known mineralization. The style of mineralization indicates potential for a feeder system to the west, requiring further exploration. At Tom South, step-outs drilled using directional cuts intersected laminated and massive sulphides, typical of the Tom deposit, that remain open along strike.

The new Popcorn discovery is located less than one kilometer northeast of Boundary Zone. Fireweed's 2024 drilling confirmed the presence of near-surface mineralization and established continuity over a strike length of 200 m. Vein and replacement-style mineralization, predominantly sphalerite, are interpreted to be part of the same mineralizing event as the massive sulphides found nearby at Boundary Zone and remain open along strike and at depth.

An updated Mineral Resource Estimate for Tom and Jason, as well as the inaugural resource for Boundary and End Zone was recently released. The total Global Mineral Resource Estimate contains an Indicated Resource of 56.00 Mt at 7.27% Zinc Equivalent ("ZnEq") (5.49% zinc, 1.58% lead, and 24.2 g/t silver) and an Inferred Resource of 48.49 Mt at 7.48% ZnEq* (5.15% zinc, 2.08% lead, and 25.3 g/t silver). Significant tonnages of critical mineral by-products, gallium and germanium, were also included in the Mineral Resource Estimate.

ADVANCING THE DUPARQUET GOLD PROJECT IN THE PROLIFIC ABITIBI GOLD BELT

James Maxwell, Caroline Pienaar, and Hazel Mullin, First Mining Gold Corp.

The Duparquet Gold Project (“Duparquet”) is a multi-million-ounce, advanced exploration and mining development asset located in the southern part of the Abitibi sub-province, one of the most prolific gold mining camps in Canada. It hosts a NI 43-101 compliant mineral resource of 3.44 Moz Au in the Measured and Indicated category (1.55g/t) and 1.6 Moz Au in the Inferred category (1.62g/t), making it one of the largest undeveloped gold projects in North America.

The Project has seen a rich history of mining and exploration, and in addition to hosting a significant defined gold resource, it has considerable exploration potential within a strongly endowed and proven gold-producing region.

First Mining Gold’s consolidated mineral tenure at Duparquet includes the past-producing Beattie, Donchester and Duquesne mines, as well as the Central Duparquet, Dumico and Pitt Gold deposits. It covers approximately 5,800 hectares over 19 km of favourable strike along the prolific Destor-Porcupine Fault Zone (DPFZ), a significant regional feature which extends eastwards through the Timmins mining camp and into the province of Quebec and has historically produced an estimated 82 Moz of gold.

Gold mineralization at Duparquet is mainly associated with the Beattie Syenite, a shallow intrusion at the junction of the DPFZ and subsidiary faults, bordered by volcanic rocks and within a basin of Temiskaming age sediments. Mineralization occurs along high strain corridors within sheared and brecciated zones that straddle or cut the margins of the Beattie Syenite. Gold is associated with sulphides and the main alteration assemblages include carbonatization, hematization, sericitization, and silicification.

First Mining will be displaying drill core from its Valentre and North Zone targets. Drillhole DUP24-024 returned multiple intervals of mineralization from a newly identified mafic volcanic unit including 10.67g/t Au over 5.3m, 6.63g/t Au over 9m, 3.04g/t Au over 33.5m, and 5.97g/t Au over 33m.

FORUM ENERGY METALS

FORUM ENERGY METALS ABERDEEN PROJECT: DEVELOPING A NEW TIER 1 URANIUM DISTRICT IN THE THELON BASIN, NUNAVUT

Rebecca Hunter, VP Exploration, Rick Mazur, President and CEO, Martin Kulla, Project Geologist, Meghan Holowath, Project Geologist, and Peter Wollenberg, Technical Advisor, Forum Energy Metals

The Aberdeen Project is a uranium exploration project located within the northeast Thelon Basin, Nunavut. Forum's exploration in the Thelon Basin is focused on finding unconformity-related uranium deposits, which are the highest-grade uranium deposits in the world. Unconformity-related uranium deposits are structurally controlled and are found proximal to Paleo- to Mesoproterozoic (ca. 1750-1500 Ma) sandstone basins either at the basal contact of the basin, known as the 'unconformity', with the underlying basement rocks or deep into the basement rock along extensions of fertile fault zones 100s of metres below the unconformity. The basement rock consists of Archean metavolcanic and metasedimentary rocks of the Aberdeen Lake group (ca. 2600 to 2750 Ma) and granite and syenite of the Paleoproterozoic (ca. 1850 Ma) Hudson Intrusive Suite. Distinct alteration halos are associated with these deposits consisting of strong argillization, hematite, limonite, bleaching, Mg-chlorite and sooty sulphide alteration. Uranium mineralization is hosted primarily along steep-dipping structures, such as fractures and non-cohesive breccias and weak to heavy disseminations in the adjacent wall rock along chemical reduction-oxidation fronts.

The project covers approximately 95,000 ha of highly prospective ground surrounding and along trend of Orano's Kiggavik Project, which hosts a current resource of 133 million lbs U₃O₈ at 0.54%. Forum's Aberdeen Project hosts two preliminary uranium discoveries named Tatiggaq and Qavvik deposits, which are both basement-hosted uranium mineralized zones. Forum commenced delineation drilling of the Tatiggaq deposit in 2023 and continued drilling to define a resource during the 2024 summer drilling program. Forum has also intersected several zones with significant alteration and favourable geochemical pathfinder elements suggesting that there is much more potential for discovery. Forum is excited to showcase an overview of the geology of the Aberdeen Project including the alteration, structures and uranium mineralization via high-resolution photos and other visual materials.

IVANHOE ELECTRIC INC.

METALS EXPLORATION FOR AN ELECTRIC FUTURE

Glen Kuntz, P.Geo., Charlie Forster, P.Geo., Mark Gibson, P.Geo., Shawn Vandekerkhove, P.Geo., Graham Boyd, and Andrea Cade, P.Geo., Ivanhoe Electric Inc.

Ivanhoe Electric combines advanced mineral exploration technologies with electric metals exploration projects predominantly in the United States along with a Joint Venture program with Saudi Arabian Mining Company (Ma'aden).

Our Santa Cruz Project in Arizona is on track to complete a prefeasibility study in Q2 2025, building from the Initial Assessment and Preliminary Economic Assessment, completed in September 2023. Since the December 2022 Mineral Resource Estimate was completed for the Initial Assessment, Ivanhoe Electric has completed over 120,000 meters of new drilling.

Assays from the recently completed development drill program continue to be received; recent intercepts include:

- 99.4 meters @ 2.39% total copper from 738.0 meters, including 46.1 meters @ 3.99% total copper from 755.9 meters (Hole SCC-234)
- 140.1 meters @ 1.56% total copper from 753.4 meters, including 29.0 meters @ 2.92% total copper from 799.0 meters (Hole SCC-228)

At our Ma'aden Joint Venture in Saudi Arabia, drilling has commenced on the first Typhoon™-identified anomaly in the Al Amar Belt less than ten months from when the first survey was initiated in November 2023. The Joint Venture has over 48,500 km² of exploration licenses and applications in Saudi Arabia. These areas are in the Al Amar Belt, the Wadi Bidah and Bir Umq Belts, and an area known as the Carbonate Platform on the eastern boundary of the Arabian Shield.

At our Hog Heaven Project in Montana, drilling demonstrates the porphyry system has significant scale and recent results show an increase in copper-dominated mineralization. Drill hole HHD-014 intersected several zones of copper, gold, and silver-rich mineralization hosted in both the volcanic diatreme and surrounding sediments. Mineralization manifests as both enargite and pyrite in disseminations and diffuse veins within the volcanic rocks.

STRIKING GOLD TWICE: UNEARTHED TREASURES AT MIDAS AND BINGO REVEALED

Dan Stuart, President and CEO and Manuele Lazzarotto, Senior Geologist, Juggernaut Exploration Ltd.

Juggernaut Exploration Ltd. is exploring two new significant gold discoveries in the southern part of the Golden Triangle in Northwest British Columbia.

The Midas property consists of a newly discovered 500-metre-long sulphide-mineralized trend displaying mineralogy and textures consistent with a gold-rich Eskay-style Volcanic Hosted Massive Sulphide system. Mineralization consists of a 10-metre-wide brecciated core zone with semi-massive to massive chalcopyrite, pyrite and sphalerite enveloped by a 40-metre zone of disseminated sulphides. The host rock is a mafic volcanic unit characterized by strong quartz-chlorite-sericite-pyrite alteration. The mineralized trend was delineated from 12 drill holes completed in 2024, detailed geologic mapping, strong Induced Polarization chargeability anomaly, as well as numerous surface grab, channel and soil samples. A sample collected from the Kokomo showing located at the northern end of the mineralized trend assayed 9.343 g/t Au, 117 g/t Ag, 1.58 % Cu and 1.77 % Zn.

The Bingo property consists of a series of sulphide-mineralized shear zones within a 700-metre-long trend. Mineralization averaging 7.32 meter wide in the form of moderate to semi-massive chalcopyrite, cobaltite and native copper has been intersected in multiple drill holes. The strong mineralization mainly occurs in breccias within a shear zone hosted in a gabbro unit that shows extensive potassic alteration in the northeast part of the property, suggesting proximity to a potential porphyry source. The mineralized trend was delineated through 31 drill holes, as well as numerous surface samples and detailed geologic mapping. Highlights from the inaugural drill program in 2023 include BI-23-01 which intersected 12.09 g/t AuEq (7.57 gpt Au, 20.23 gpt Ag, 2.72 % Cu and 1624 ppm Co) over 5.11 meters, while surface grab samples assayed up to 13.4 gpt Au.

THE MPD PROJECT: EXPANDING MULTIPLE PROSPECTIVE CU-AU PORPHYRY SYSTEMS IN SOUTHERN BC

Dave Skelton and Jeff Ward, Kodiak Copper Corp.

The MPD Project is in South-Central British Columbia, 25 km south of Merritt and 10 km north of Princeton. Kodiak Copper Corp. initially acquired the property in 2018 and has subsequently increased the land package to 33,848 Ha, consolidating five historic prospect areas into a single project for the first time (Man, Prime, Dillard, Axe and Ketchan).

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 the world-class Highland Valley mine, New Afton and the Copper Mountain mine. Late Triassic-Early Jurassic alkalic and calc-alkalic island-arc volcanics and co-magmatic intrusives of the Nicola Group underlie most of the property. Copper-gold mineralization at MPD is hosted by northly trending, steeply dipping, altered dioritic rocks, phyrlic volcanics and late-stage structurally controlled veining.

The Gate Zone was discovered in 2019 by a single drill hole which tested the north end of a copper-in-soil anomaly. Additional drilling from 2020 to 2022 defined a high-grade copper-gold zone within a wider mineralized envelope including a 282-metre intercept with 0.70% Cu and 0.49 g/t Au. The mineralization was traced for one kilometre along strike and extended over a width of 350 metres and a depth of 900 metres. Drilling in 2022 also successfully extended known mineralization to depth on the Dillard and Prime Zones which are in close proximity to Gate.

Recent drilling in 2023 and 2024 focussed on expanding several different porphyry systems including the West, Man, Adit and South zones. Drilling at the West Zone intersected 941 metres of 0.21% Cu and 0.16 g/t Au including 254 metres of 0.49% Cu and 0.29 g/t Au. Evidence of high-temperature mineralization was also encountered at West in a copper bearing hydrothermal breccia that was identified below 735m. Drilling at Man intersected several zones of mineralization from 29 to 924 metres, including 0.34% Cu, 0.28 g/t Au and 1.71 g/t Ag over 116 metres. The Adit zone is a strongly altered porphyritic diorite that exhibits Cu oxide at the surface changing to Cu sulphide at depth. Drilling in late 2024 expanded the Adit zone by returning 0.38% Cu, 0.05 g/t Au, 5.37 g/t Ag over 139 metres from 112 to 251 metres. Step out drilling 200 metres to the north also intersected a new zone of mineralization, extending the Adit zone to > 500 metres in length. Drilling at the South zone returned 0.31% Cu over 234 meters from surface, within a broader 1053 metre intersection assaying 0.17% Cu. The drilling confirmed mineralization at South over a minimum strike length of 900 metres and depth of 775 metres.

The MPD Project has all the hallmarks of other major porphyry districts in British Columbia and based on the work completed to date has the potential to host an economic deposit.

KOOTENAY SILVER INC.

COLUMBA SILVER PROJECT: DEFINING A NEW SILVER DISTRICT IN CHIHUAHUA, MEXICO

Luis Moya, Roberto Jordan, Gustavo Gallego, Luis Hernandez, Diego Rodriguez, Tom Richards and Dale Brittliffe, Kootenay Silver Inc.

Located in northern Chihuahua, Mexico, the Columba Project is a mid-stage exploration project centered on a past producing high-grade silver mine developed from 1900-1910 and then briefly again during the early 1960's.

Columba project is a silver-zinc-lead bearing intermediate sulfidation epithermal system comprising veins and breccias hosted within a 5 km x 5km felsic caldera system of probable late Eocene/Early Oligocene age.

Facies within the caldera basin are dominantly felsic, including massive and flow banded rhyolites and associated interbedded volcanic breccias which grade intermittently with immature volcanic conglomerate, sandstone, siltstone and mudstones. Intrusive rocks are present as resurgent domes within its centre.

The mineralized system is characterized by an extensive set of northeast and northwest trending veins and splays cutting all lithologies. Silver grades demonstrate a vertical zonation from non to weakly anomalous at upper levels, increasing with depth into strongly mineralized "bonanza" grades. At the upper levels quartz-calcite-barite veining forms narrow fractured and brecciated zones with weak silicification plus or minus irregular veinlets of chalcedonic quartz and or calcite. At deeper levels crustiform-colloform banded quartz-calcite-barite veins are continuous with widths ranging up to 6 meters often flanked by silver-bearing stockwork zones that can range up to 10 meters in width. Economic minerals include tetrahedrite, galena, sphalerite, proustite and native silver.

Geological mapping and sampling confirm an extensive network of veining, much of which is yet untested by drilling. Recent work has focussed on four of the main vein occurrences, drill patterns designed to intercept mineralization on a suitable spacing for an initial Mineral Resource Estimate.

Many linear kilometers of veining remain to be drill tested and all drilled veins remain open to depth. The Columba project is a highly prospective project with potential to grow into a significant silver vein camp.

LI-FT POWER LTD.

YELLOWKNIFE LITHIUM PROJECT

David Smithson, Li-Ft Power Ltd.

The Yellowknife Lithium Project (YLP) comprises a series of mining leases that cover the majority of the lithium pegmatites that make up the Yellowknife Pegmatite Province (YPP). Numerous spodumene-bearing pegmatites with strike lengths up to 1,800m and widths up to 30m outcrop in the project area.

The YLP is close in proximity to the city of Yellowknife with the closest outcropping pegmatite only 18km from the eastern city limits. Between July 2023 and April 2024, LIFT successfully completed 50,000 m of diamond drilling, in 286 drill holes across 8 pegmatite targets with the results indicating an average lithium grade ranging from 1.0% to 1.20% Li₂O. In October 2024, an initial Mineral Resource Estimate (MRE) of 50.4 million tonnes (Mt) at 1.00% Li₂O was announced, marking the 3rd largest initial resource estimate for spodumene projects in Canada.

The initial resource estimate further positions the YLP as a globally significant source of spodumene and will support a Preliminary Economic Assessment (PEA) that is on track to be completed in Q2 2025.

ANTLER VMS: HIGH GRADE COPPER EXPLORATION AND DEVELOPMENT IN ARIZONA, USA.

Nick Woolrych, Managing Director, Patrick Siglin, Exploration Manager, and Tracy Roach, Project Manager, New World Resources

The Antler Copper Deposit located in northwestern Arizona, USA is a high-grade, polymetallic, volcanogenic massive-sulphide (VMS) copper-zinc-lead-silver-gold deposit. Mineralization outcrops at surface over 750m of strike and is open at depth. A JORC Mineral Resource Estimate was released in November 2022 and comprises 11.4 million tonnes at 2.1% Cu, 5.0% Zn, 0.9% Pb, 32.9 g/t Ag silver and 0.36 g/t Au.

Antler was discovered in the late 1800's. Historical production was intermittent from 1916-1970 during which time approximately 70,000 tonnes at 2.9% Cu, 6.2% Zn, 1.1% Pb, 31 g/t Ag, and 0.3 g/t Au were mined and processed.

The Antler Deposit lies within a NE-trending belt of Precambrian metasediments and metavolcanics which comprise felsic to mafic compositions of gneisses and schists subject to amphibolite grades, multiple intrusions, and deformation events. This belt contains two known VMS deposits, Antler and Copper World. Sulfide mineralogy at Antler is a combination of sphalerite, chalcopyrite, and galena with pyrrhotite and pyrite. They are massive to disseminated, stratabound, and are interpreted to be syn-volcanic and both replacement and exhalative-type. Present-day replacement-style mineralization is attributed to at least one re-mineralizing event.

The predominate wall rock to sulfide mineralization is quartz-biotite (feldspar) schist or meta-rhyolite. There are two parallel lodes of mineralization, east and west, which are separated by as much as 45 meters of barren schist. The two limbs appear to converge forming northward-trending shoots of mineralization referred to as Main Shoot and South Shoot.

NORTHWEST EXPO AND WEST GOODSPEED, VANCOUVER ISLAND, B.C. CANADA

Northwest Expo is one of eight porphyry related deposits/targets extending in a belt over 40 kilometres from BHP's former Island Copper mine through Northisle Copper and Gold's 34,000-hectare mineral tenure near Port Hardy, Vancouver Island, BC. Within this belt, of Jurassic Island Arc volcanism (Bonanza Formation) and coeval Island Intrusives (diorite to quartz monzonite) are the Hushamu Deposit (472.8M tonnes Indicated grading 0.2% Cu, 0.23g/t Au, 0.008% Mo, 0.35g/t Re) and Red Dog Deposit (54.5M tonnes indicated grading 0.22% Cu, 0.31g/t Au, 0.04g/t Re). The 2024 maiden indicated resource for Northwest Expo is 45million tonnes grading 0.11% Cu and 0.64g/t Au. An additional target - West Goodspeed, discovered in 2023, now with 12 holes completed, extends over 1,000 metres strike length, 120 metres width and over 200 metres downdip is within the lower part of a porphyry systems with quartz-sericite-pyrite and chlorite-magnetite (after biotite-magnetite) alteration with several generations of quartz and magnetite plus chalcopyrite stockwork veining overprinting each other. It is now recognized that, mineralization at Hushamu and Northwest Expo are hosted within the lithocap facies of porphyry systems. Lithocaps are common in young South American and Southeast Asia porphyry deposits, but in BC the lithocaps that may have existed have mostly been eroded down to the cupola or 'stem'. At Northwest Expo and Hushamu the lithologic/alteration features characterizing lithocap hosted mineralization are:

- Extensive intense advanced argillic alteration ranging from high temperature/low pH pyrophyllite-dickite through kaolinite-dickite to lower temperature higher pH illite-smectite at the periphery;
- Silica-brine immiscibility (gusano) textured alteration extending above the hydrothermal upflow zone;
- Fluorine bearing minerals topaz and zunyite occurring in the hydrothermal upflow zone;
- Extensive hydrothermal breccias;
- Unique to Hushamu and Northwest Expo laterally layered, mottled silica-chlorite-magnetite- chalcopyrite mineralization. This is retrograded from biotite-magnetite

Utilizing visual observations of alteration textures and SWIR logging SWIR active minerals has allowed Northisle to locate each drill hole with respect to the hydrothermal up flow zone of the porphyry system and allow vectoring to the causative intrusion(s). The core from Northwest Expo and West Goodspeed being displayed will be correlated to their positions within the porphyry system.

ONYX GOLD CORP.

NEW GOLD DISCOVERIES IN THE HISTORIC TIMMINS CAMP: ARGUS ZONE AND GM VEIN, MUNRO-CROESUS PROPERTY

Conor McKinley, Vice President Exploration, Ian Cunningham-Dunlop, Executive Vice President, and Brock Colterjohn, President & CEO, Onyx Gold Corp.

Onyx Gold's Munro-Croesus Property, located in Ontario's prolific Timmins Gold Camp, continues to deliver significant new discoveries. Recent drilling has unveiled two promising zones: the bulk-tonnage Argus Zone; and the high-grade GM Vein, reinforcing the potential for both large-scale and high-grade gold mineralization on the Property.

The Argus Zone has yielded the Property's most substantial gold intercept to date, with drill hole MC24-163 intersecting 4.05 g/t gold over 10 meters within a broader interval of 1.87 g/t over 48.1 meters. This zone is characterized by silica- and albite-altered mafic variolitic basalt, cut by northeast-trending pyritic veinlets and local development of specular hematite. The mineralization is associated with pyrite replacement in the form of stringers, aggregates, veinlets, and vein haloes rather than quartz veins that are more typical of orogenic gold deposits. Located along the underexplored Pipestone Fault, the Argus Zone boasts a large and growing footprint of bulk-tonnage-style mineralization (0.1 to >2.0 g/t over a 750-meter x 200-meter area). The grade x thickness profile of MC24-163 compares favorably with discovery hole intersections of known major (>2 Moz) Canadian gold deposits.

The GM Vein, located 350 meters from the historic Croesus Gold Mine, has delivered the highest-grade gold intercept ever recorded by Onyx Gold. Drill hole MC23-132 returned 363 g/t Au over 0.3 meters within a broader interval of 121.8 g/t Au over 0.9 meters, at just 50 meters below surface. Drilling has now defined a higher-grade shoot plunging moderately to the southwest, and the vein remains open for expansion in all directions, underscoring its potential for further bonanza-grade discoveries.

These results highlight the untapped exploration potential within the Munro-Croesus Property and reinforce Onyx Gold's strategic focus on advancing new discoveries in this mature, highly prospective mining camp.

CHUCHI PORPHYRY COPPER-GOLD PROJECT: A 30-YEAR EXPLORATION DRILLING HIATUS

C. Paul Jago, Danette Schwab, Gerry Carlson, and Alejandra Flores, Pacific Ridge Exploration Ltd.

The BP Zone ("BPZ") of the early exploration stage Chuchi copper-gold project is 35 km northwest of the Mount Milligan mine and alkalic porphyry deposit. BPZ was discovered by BP Resources Canada Limited during the same time as the Mt. Milligan discovery. This led to 62 drill holes in BPZ between 1989-1991 delineating a 1100 x 650 metre area of porphyry mineralization to shallow depth (average vertical depth of 140 m). In 1991, BP Resources ceased mineral exploration in Canada. In 2019, Centerra Gold Inc. completed four drill holes. Since 2022, Pacific Ridge Exploration Ltd. completed airborne and ground geophysical surveys and developed 3D geophysical models that have been used to update the BPZ geological model and exploration strategy.

In 2024, Pacific Ridge completed five drill holes over a 750-metre strike length across BPZ with some of the project's best-ever results. This includes CH-24-073, returning 65.0 metres of 0.31 percent copper, 0.16 gpt gold, and 0.69 gpt silver, within 382.0 metres of 0.19 percent copper, 0.12 gpt gold, and 0.47 gpt silver.

The program revealed two porphyritic stocks, one in BPZ and one in Digger Zone ("DZ"). The Company believes these represent the upper part of a telescoped porphyry copper-gold system. Chalcopyrite-pyrite mineralization appears to dip westward, following a NE-trending corridor centered on the North Central fault. Faulted, brecciated and calc-potassically altered contact zones at the stock margins were identified as areas of strongest mineralization. Relogging of DZ drill hole CH-91-42, which returned 229.2 metres of 0.10 percent copper and 0.61 gpt gold, suggests a lithocap root zone. Deepest porphyry mineralization has been intersected at 420 metres vertical depth in CH-24-070. The Company believes all drilling to date is several 100 metres above a porphyry core situated near the Early Jurassic and Late Triassic volcanic successions contact.

POWER NICKEL

THE NISK POLYMETALLIC PROJECT, A HIGH-GRADE NI-CU-PGES-AG-AU MINERALIZED SYSTEM

Eric Hébert, Geovector Management, Power Nickel

Located in the Eeyou Istchee James Bay region of Quebec, the Power-Nickel Nisk Project lies within the Bande du Lac des Montagnes volcano-sedimentary formation (“BLM”) of the Nemiscau subprovince, between the Champion Lake granitoids and orthogneiss and the Opatica NE, which is made of orthogneiss and undifferentiated granitoids.

The Nisk Project consists of a series of ultramafic intrusive layered sills forming lenses as a result of deformation and metamorphism to amphibolite facies. The main layers include pyroxenite at the top (clinopyroxenite, websterite, orthopyroxenite), a grey colour peridotite and a black serpentized dunite at the bottom. Two deposits occur, the Nisk Main deposit and the Lion Zone. The Nisk deposit consists of massive and semi-massive sulfide cumulates hosted in the dunite, essentially pyrrhotite (Fe_{1-x}S), chalcopyrite (CuFeS₂), pentlandite [(Fe, Ni)₉S₈] and pyrite (FeS₂) forming a classic Ni-Cu-Co-PGE deposit (total resource estimate of 7.2Mt grading 0.82% Ni, 0.4% Cu, 0.05% Co, and 0.86 g/t Pd in 2023). About 5.5 km to the northeast, the Lion Zone consists of a tonalite-hosted breccia filled with massive chalcopyrite forming the main mineralized zone, with disseminated chalcopyrite in the hanging wall. The Lion Zone consists of a polymetallic system, Cu-PGE-Ni-Ag-Au.

Although the Nisk Main deposit and Lion Zone differ greatly in term of mineralization style and geochemistry, the two deposits are actually part of a larger system that is consistent with the fractionation of nickel sulfides. The original sulfide liquid usually formed a mono sulfide solution (MSS), rich in Ni-Co-PGEs, while the residual liquid ended up highly concentrated in elements such as Cu, PGE, Ag, Au and Zn. The Power-Nickel Nisk property includes both end members of such a system, thus suggesting a mineralized system at larger scale.

Power Nickel plans to complete an aggressive 30,000m winter drill program in 2025.

PRODIGY: A NEW HIGH-GRADE GOLD-SILVER DISCOVERY IN CENTRAL BRITISH COLUMBIA

Farshad Shirmohammad, Senior Advisor – Geology, Cole Evans, Chief Operation Officer, and Robert Dickinson, CEO and Chairman, Quartz Mountain Resources Ltd.

Quartz's two, scout-hole drill program at Prodigy intersected overlapping, multi-generation, precious and base metal mineralization, and represents the discovery of a substantial new Au-Ag mineralized system, potentially related to the nearby Lone Pine Mo-Cu porphyry system. Diamond drill hole PR-23-02 in the Prodigy area intersected 102 m grading 2.22 g/t Au and 104 g/t Ag, including 12 m grading 1.23 g/t Au and 586 g/t Ag. The lower part of this broad 102-m interval included a number of high-grade gold-silver lodes, including a spectacular gold-rich 36-m semi-massive sulphide zone, grading 5.73 g/t Au and 87 g/t Ag. Mineralization remains open in multiple directions, promising significant further potential.

The Maestro Project lies adjacent to Highway 16, approximately 15 km north of Houston and 50 km south of Smithers, BC. Covering 2,309 hectares, the property has a rich exploration history, primarily focusing on the Lone Pine molybdenum deposit (110 Mt at 0.08% Mo, Measured and Indicated). Since acquiring the property in 2021, Quartz has conducted comprehensive geological, geochemical and geophysical surveys, with a focus on the Prodigy area located one kilometer north of the Lone Pine deposit.

Specifically, a detailed core study and re-logging of 10 historical drill holes (by Dr. Farhad Bouzari, Mineral Deposit Research Unit, UBC) in the Prodigy area provided an important framework to identify and characterize vectors of mineralization. Notably, the correlation between strong green sericite alteration and thick, gold-silver rich mineralization, was identified and documented.

JAKE: A NEW PORPHYRY COPPER-GOLD-SILVER DISCOVERY IN NORTH CENTRAL BRITISH COLUMBIA

Quartz's maiden seven-hole, 3,418 m scout core drilling program made a new BC copper-gold porphyry discovery at the Jake Project, located 160km north of Smithers. The scout drilling target area was selected after comprehensive review of historical data, combined with favourable results from geological, geochemical and geophysical surveys conducted by Quartz.

The Jake Project is underlain by the Middle-Upper Jurassic Bowser Lake Group. These rocks were intruded by Tertiary (Kastberg and Babine) intrusives in the form of dykes, stocks and plugs, creating widespread centers of hydrothermal alteration. Early geological observations from Quartz's drilling program at Jake suggest geological similarities between Jake and Babine porphyry systems, which are known for their association with Cu-Au mineralization.

The successful Jake discovery drilling included seven exploration drill holes that were completed from three pad sites. Holes JK24-02,03,04,05 were fanned out from Pad B, located in the centre of the target area. All these holes intersected porphyry copper-gold-silver mineralization, with near-vertical Hole JK24-05 being closest to the centre of the system, returning a 215-m intersection of 0.23% Cu, 0.08 g/t Au and 2.7 g/t Ag. The upper 74-m of this zone returned 0.30% Cu, 0.12 g/t Au and 2.5 g/t Ag. Mineralization remains open in multiple directions, promising significant expansion potential

SEABRIDGE GOLD

PROMISING RESULTS FROM DRILLING AT SEABRIDGE GOLD'S ISKUT PROJECT

Marcus Adam, Bill Threlkeld, Hannah Cavallin, Kate Gleadow, and Ryan Friesen, Seabridge Gold

Drilling has generated broad widths of important gold and copper and grades within a large potassic alteration system at the Snip North target. The scale and character of the mineralization suggest the likelihood of a nearby porphyry intrusive source feeding, and localized by, well mineralized tuffaceous stratigraphy several hundred meters thick.

The remaining objective at Snip North is to encounter intrusive rock with the veining and alteration characteristic of a porphyry Cu-Au mineral deposit, containing copper and gold of potentially mineable grades. To date, we have intersected an intensive and extensive potassium alteration event hosted in a tuffaceous package of the Triassic Stuhini Formation containing important gold and copper concentrations. This mineralized package is several hundred meters thick with known dimensions of about 1.5 km by 500 meters. Potassic alteration consists of pervasive, and vein controlled, secondary biotite and orthoclase with associated magnetite. Frequent but not abundant Quartz-Biotite-Chalcopyrite veins (B-style veins) cut this unit with localized zones of abundant disseminated chalcopyrite.

Key observations with favorable implications for a potentially robust Cu-Au porphyry source:

- Extensive potassic alteration would most likely have occurred proximal to a magmatic hydrothermal event generated by a porphyritic intrusion.
- Sizeable magmatic fluid volumes were needed to account for the scale of the potassic alteration, requiring substantial energy and suggesting a large and nearby intrusive source.
- The expected role of chemically reactive tuffaceous rocks supports the likelihood that metal concentrations would not have been displaced significantly from the source intrusion.

SILVER47 EXPLORATION CORP.

RED MOUNTAIN PROJECT: HIGH-GRADE SILVER-ZINC-GOLD-LEAD-COPPER VMS MINERALIZATION OF THE BONNIFIELD DISTRICT, CENTRAL ALASKA

Alex S. Wallis, VP Exploration, Silver47 Exploration Corp.

The Red Mountain property covers 633 square kilometres of Alaska State-managed land 100km south of Fairbanks, Alaska. The project is well situated for infrastructure, 30km east of the community of Healy which has power, rail and state highway Alaska Route 3, providing a valuable connection to Anchorage and tide water.

Red Mountain hosts a NI 43-101 inferred mineral resource estimate of 15.6Mt at 7% ZnEq for 1Mt of ZnEq or 335.7 g/t AgEq for 168.6 Moz AgEq at the Dry Creek (DC) and West Tundra Flats (WTF) resource areas as combined open pit and underground. The mineralization is typical of VMS deposits, hosted in a sequence of metavolcanic and metasedimentary units of the Totatlanika Schist. DC and WTF are the two most advanced mineralized zones at Red Mountain, with at least 20 additional mineralized prospects discovered on the property to date over the 60 kilometres of highly prospective geology.

Red Mountain VMS mineralization lenses occur as semi-massive to massive silver-zinc-lead-gold-copper sulphides and include a mixture of very fine pyrite, sphalerite, galena, and chalcopyrite. The DC horizon can be traced for 4,500 meters of which the central 1,400 m host the Fosters and Discovery lenses of mineralization with true width intersections up to 40 m at Fosters. The WTF prospect main zone extends at least 1,000 m along strike and is up to 4.4 m thick.

The 2024 drilling campaign was designed to confirm and step out from historical results at the two resource zones. At Dry Creek, hole DC24-106 cut 2.48m of 14.95g/t gold, 249.5g/t silver, 21.9% zinc, 7% lead, and 0.42% copper, or 2,938.5g/t Ag Eq within 24.51m of 486.3g/t Ag Eq.

SITKA GOLD CORP.

RC GOLD PROJECT REDUCED INTRUSION RELATED GOLD SYSTEM, TOMBSTONE GOLD BELT, YUKON

Mike Burke, Don Penner, and Greg Dawson, Sitka Gold Corp.

The RC Gold Project is owned 100% by Sitka Gold Corp. The property is located 110km east of Dawson, Yukon, at the headwaters of Clear Creek, a prolific producer of placer gold for the last 120 years.

The RC Gold project lies within the E-W trending Tombstone Gold Belt which is host to several gold deposits related to the Tombstone Thrust and the occurrence of Cretaceous Intrusions which are the primary hosts for these Reduced Intrusion Related Gold deposits.

This area has been explored for decades by numerous operators in their search for the hard rock gold deposits as the likely source for the placer gold in Clear Creek.

The discovery of two deposits at RC Gold in 2021 led to a total initial inferred pit-constrained resource of 1.34 million ounces of gold with a grade of 0.68 g/t at a cut-off of 0.25 g/t gold announced in January 2023 in two deposits. The higher-grade Blackjack deposit consists of 900,000 ounces at a grade of 0.83 g/t gold based on 7,492 metres of drilling in 22 holes. Each successive drill program has significantly advanced the project with drill programs in 2023 and 2024 focused on expanding the Blackjack deposit and initial drill testing of other known mineralized intrusions on the project.

Success for the project continued in 2024 by defining gold mineralization south and to depth from the current limits of the known Blackjack resource boundaries. Hole 24-68 averaged 678.1m of 1.04 g/t gold from near surface, which included high grade intervals of 93m of 2.57 g/t gold and 5.5m of 17.59 g/t gold. The grade appears to increase with depth and extends 200m below the limits of the current proposed pit shell.

SNOWLINE GOLD CORP.

VALLEY – A HIGH-GRADE REDUCED INTRUSION RELATED GOLD SYSTEM IN THE YUKON TERRITORY, CANADA

Andrew Turner, Thomas Branson, Sergio Gamonal and Scott Berdahl, Snowline Gold Corp.

Valley is a significant new Reduced Intrusion-Related Gold System (RIRGS) discovery in the Selwyn Basin of the Yukon Territory. Since its launch in 2021, Snowline has progressed the Valley target from a greenfield prospecting discovery to a significant bulk tonnage gold resource, with 4.05 Moz gold indicated mineral resource at 1.66 g/t Au and an additional 3.26 Moz inferred mineral resource at 1.25 g/t Au within a pit-shell constraint.

The Valley pluton is a one-kilometer-scale, mid-Cretaceous aged Mayo-series granodiorite, which intrudes siltstones and shales of the Ordovician-Silurian Road River group. The granodiorite hosts a high density of gold-bearing sheeted quartz+carbonate veins, with up to 30 veins per metre. Gold mineralization is texturally related to bismuthinite, scheelite and telluride minerals with similar Bi-Te pathfinder element association observed in drill core geochemistry. The pluton is surrounded by a pyrrhotite-rich contact-aureole, however the sheeted veins are sulphide poor, with minor pyrite, pyrrhotite, chalcopyrite and arsenopyrite. Vein orientations are dominantly controlled by steep northwest-striking faults, though veins are known to occur in at least three orientations. Mineralization begins at surface, and locally, high-grade mineralization appears to be spatially associated with a late, fine-grained porphyritic intrusive phase.

Valley is located within the Tombstone Gold Belt, a trend of RIRGS deposits including Kinross's Fort Knox Mine in Alaska. However, compared to Fort Knox, Valley hosts substantially higher grades. Exploration of the open Valley system is ongoing and is the primary focus of exploration activities within Snowline's Rogue Project, which covers a 30 km by 60 km magnetic geophysical anomaly associated with multiple mid-Cretaceous intrusions similar to Valley, along with widespread gold anomalism in stream sediment, soil and rock samples. Elsewhere, RIRGS deposits are known to occur in clusters, and the Rogue Project has district-scale potential to host additional reduced intrusion-related gold systems.

SOUTHERN CROSS GOLD

SUNDAY CREEK: AN EXPANDING AND SIGNIFICANT GLOBAL GOLD AND ANTIMONY DISCOVERY

Kenneth Bush, Exploration Manager and Michael Hudson, Managing Director, Southern Cross Gold

Located in Central Victoria, Australia, the Sunday Creek project is one of the most exciting pre-resource Au-Sb exploration projects in Australia. Sunday Creek is within the Melbourne Structural Zone in the Lachlan Fold Belt. The regional host to the Sunday Creek mineralisation is an interbedded turbidite sequence of siltstones, mudstones, and minor sandstones, metamorphosed to sub-greenschist facies and folded into a set of open north-west trending folds. Intruded into this sedimentary sequence is a series of intermediate monzodiorite – diorite dykes and breccias on an east-west trend.

Mineralisation is structurally controlled, with increased mineralisation associated with brittle-ductile shear veins that show quartz-stibnite extension veining, stibnite-gold-matrix breccias and disseminated mineralisation in the form of arsenian pyrite, pyrite and arsenopyrite. The main host for mineralisation is an east to north-east trending zone of intensely altered 'bleached' silica-sericite-sediments and a silica-sericite-carbonate-fuchsite altered dyke rocks that ranges from 20 - 110 m wide.

Mineralised vein arrays cross the host structure on a predominate north-west orientation at Apollo and Rising Sun these vein sets have been defined over 600 m depth extent from surface to 1,200 m below surface, are 2.5 to 3.5 m wide (up to 10 m), and 20 m to 100 m in strike. High-grade "cores" are observed within vein arrays and have much more complex multi-phase textures and high antimony grades (+5% Sb) and typically have visible gold or +20g/t Au up to 1000+ g/t Au values.

Re-Os dating of Mineralisation has returned a weighted mean age of 379 ± 1 Ma, consistent with surrounding epizonal deposits of similar characteristics (Fosterville and Costerfield) that formed during the Tabberaberan Orogeny.

The project has been delivering a globally leading hit rate with 46 individual intersections exceeding 100 AuEq g/t x m from 62km of drilling undertaken predominantly over the last two years.

THE WEST GRAHAM NICKEL – COPPER PROJECT: LOCATED IN THE HEART OF THE SUDBURY MINING CAMP

Grant Mourre, SPC Nickel Corp.

The West Graham Project is in the heart of the Sudbury Mining District where nine mines are currently in operation. The region benefits from its proximity to well-developed transportation infrastructure including roads, railways, and electrical grid. In addition, West Graham is situated close to processing, smelting and refining assets which include two mills, two smelters and one nickel refinery.

The West Graham deposit is interpreted to represent a large, lower-grade nickel-copper bearing contact-type disseminated or blebby sulphide deposit hosted by medium-grained norite and located stratigraphically above sublayer norite at the base of the Sudbury Igneous Complex. The deposit outcrops at surface, extends for some 500 metres on strike and 900 metres along dip, and averages 40 to 50 metres thick.

In 2024, the Company published a new Mineral Resource Estimate for the property that contained an 'In-Pit' resource of 19.3 million tonnes grading 0.42 percent nickel, 0.28 percent copper (0.57 percent nickel equivalents) in the indicated category and 3.3 million tonnes grading 0.37 percent nickel, 0.28 percent copper (0.53 percent nickel equivalents) in the inferred category.

In 2024, the Company completed a 37 hole, 2,600 metre drill program at West Graham. Highlights from the program include: WG-24-088 that returned 37.95 metres grading 0.87 percent nickel and 0.32 percent copper (1.08 percent nickel equivalents) including 16.0 metres grading 1.41 percent nickel and 0.33 percent copper (1.67 percent nickel equivalents).

The West Graham Project is part of the Company's larger-scale nickel-copper property in the southwest corner of the Sudbury Basin, referred to as the Lockerby East Property. In addition to the West Graham Deposit, the property also hosts the high-grade LKE Deposit. Located 200 metres down-dip of the West Graham Resource, the deposit is comprised of a lens of high-grade nickel-copper massive sulphide located along the contact of the Sudbury Basin.

SUMMA SILVER CORP.

SUMMA SILVER – EXPLORING FOR HIGH-GRADE, EPITHERMAL-RELATED SILVER AND GOLD MINERALIZATION ACROSS FAMOUS MINING DISTRICTS IN SOUTHWEST UNITED STATES

Chris York, Daniel Verrell, Galen McNamara, Christopher Leslie, and Giordy Belfiore, Summa Silver Corp.; Ben Hinkle, Rangefront Mining Services

Summa Silver Corp. is focused on silver and gold exploration across two projects in the southwest United States. The Hughes project, central Nevada and the Mogollon project, southwest New Mexico are centered on historic mining districts and have been the subject to multiple exploration drill programs since 2020.

The Hughes project comprises the eastern extension of historic Tonopah Mining district, covering a ~6.5 km east-west trend of epithermal-related high-grade Ag-Au targets. Central to the project is the past producing Belmont Mine, which exploited a series of stacked, moderately to steeply dipping, southwest-northeast oriented high-grade veins.

Previous drill programs by Summa targeted high-grade extensions of some of these veins and yielded intercepts highlighted by 536 g/t AgEq over 18.5 m (286 g/t Ag, 3.1 g/t Au; SUM20-06) and 3,971 g/t AgEq over 2.8 m (2,252 g/t Ag, 21.6 g/t Au; SUM21-30). Recent project-wide, multidisciplinary exploration programs defined multiple targets east of the Belmont Mine, where significant Ag-Au vein discoveries have been made (e.g., 1,450 g/t AgEq over 3.0m; SUM23-59 at the Ruby target). Drilling is currently focused on testing the extent and continuity of mineralization eastward from Ruby.

The Mogollon project is host to numerous low-sulfidation, epithermal-related silver-gold targets dispersed across ~77 km of near-continuous and complex vein-systems. Historical mining produced approximately 13.1 Moz Ag and 271 koz Au, primarily from three mines: Fanney, Last Chance and Consolidated.

Recent drilling across 500 m of strike length at the Consolidated Ext. target intersected broad zones of quartz-calcite breccias and stockworks with colloform banded veins. Drill highlights include 448 g/t AgEq over 31 m (129 g/t Ag, 3.88 g/t Au; MOG22-05). Recent drilling, 1.4 km south of Consolidated Ext. near the Eberle mine intersected 393 g/t AgEq over 7.4 m (64 g/t Ag, 3.9 g/t Au) including 2,735 g/t AgEq over 1.5 m (320 g/t Ag, 28.6 g/t Au; MOG23-22). Queen vein-hosted mineralization at both targets remain open along strike.

SUN SUMMIT MINERALS CORP.

SUN SUMMIT MINERALS: FOCUSED ON DISCOVERY AND ADVANCEMENT OF DISTRICT-SCALE GOLD AND COPPER ASSETS IN BRITISH COLUMBIA

Ken MacDonald, Vice President of Exploration and Sharyn Alexander, President, Sun Summit Minerals Corp.; Christopher Leslie, Geological Consultant, Technical Advisor, C.D.L. Geological Consulting

Sun Summit Minerals is focused on discovery and advancement of district scale gold and copper assets in British Columbia. The diverse project portfolio includes the JD Project in the Toadogone region of north-central BC, and the Buck Project in central BC.

The JD Project is in the Toadogone gold-copper mining district, a highly prospective, deposit-rich metallogenic belt. The project is near active exploration and development projects, including Thesis Gold's Ranch and Lawyers project.

The JD Project is underlain by prospective geology host to high-grade epithermal-related gold and silver mineralization, as well as porphyry-related copper and gold mineralization. The epithermal-related systems are poorly explored and represent high-grade gold and silver mineralization potential.

Recent exploration at JD confirmed the high-grade gold and silver potential of several target areas as well as identified previously unrecognized bulk tonnage-style disseminated mineralization. Highlights from the 2024 exploration program include: 61.5 m @ 1.07 g/t Au incl. 0.50 m @ 24.3 g/t Au (CZ-24-001), 122.5 m @ 2.11 g/t Au incl. 1.5 m @ 121.0 g/t Au (CZ-24-004), and 57.95 m @ 2.69 g/t Au incl. 0.25 m @ 362.0 g/t Au (CZ-24-005).

The Buck Project is in a historic gold-silver mining district with excellent infrastructure that allows for year-round, road-accessible exploration. The Company has been focused on investigating the lateral and vertical extent of epithermal-related gold-silver-zinc mineralization at the Buck Main system where over 34,500 metres of diamond drilling in 98 diamond drill holes have been completed. The Company has also defined additional drill targets across the entire land package that warrant drill testing.

The 2024 field program at Buck included examination, logging and sampling of historical drill core from the CR South Porphyry Zone, and geological mapping and sampling on both the South Porphyry and North Porphyry zone.

UNVEILING KELLO KELLO: A TECK POLYMETALLIC DISCOVERY IN SOUTHERN PERU

Nicholas Beischer, Senior Project Geologist, Teck

Kello Kello is a new Cu-Au-Ag-Zn-Pb discovery located in the Southern Peru Altiplano, approximately 70 km west of the city of Juliaca, Puno. It is an intermediate sulfidation epithermal system with breccia-hosted polymetallic mineralization style similar to those present at the Peñasquito and San Gabriel deposits located in Peru and Mexico respectively.

Regionally, Kello Kello occurs in Tertiary continental volcanic rocks and it is hosted in a late Oligocene (26.7 Ma + 0.8 U-Pb zircon) hornblende-biotite quartz diorite pluton which was intruded into a sequence of Cretaceous shallow-marine carbonate rocks unconformably overlain by an Oligocene volcanoclastic package. The core (~ 0.5 square kilometer) of the breccia-hosted mineralization is surrounded by a kaolinite-chlorite-quartz-barite assemblage that extends outward over an area of ~ 1.5 square kilometers. Five breccia-hosted mineralization types have been identified based on texture, cement type and relative timing. From oldest to youngest these are: 1) Mosaic breccia cemented by specularite and chalcopryrite, 2) Crackle breccia cemented by barite, chalcopryrite and specularite, 3) Chaotic matrix breccia partially cemented by specularite and chalcopryrite, 4) Mosaic breccia cemented by limonite, quartz and pyrite, and 5) Paragenetically late, galena, sphalerite, pyrite breccia veins. The above-mentioned breccia types are characterized by subhedral, equigranular quartz diorite clasts with subordinate volcanoclastic and carbonate clasts.

Significant drill intervals (apparent thickness) include: 383m of 0.41% Cu, 0.17g/t Au and 5.0 g/t Ag from 27 meters and 141m of 0.60% Cu and 5.0 g/t Ag from 328 meters.

TECTONIC METALS INC.

THE FLAT GOLD PROJECT: BULK TONNAGE AND REDUCED INTRUSION-RELATED GOLD SYSTEM

Peter Kleespies and Jesse Manna, Tectonic Metals Inc.

Flat is an exploration-stage gold project in SW Alaska, within the Kuskokwim Mineral Belt. Spanning 99,800 acres of Native-owned land managed by Doyon, Limited, Flat hosts bulk-tonnage, intrusion-related gold mineralization similar to the Fort Knox gold mine. With 1.4 Moz of placer gold produced from streams draining the intrusions, the project highlights a direct relationship between placer gold and bedrock sources, making it a key case study in geologic research.

Flat's partially unroofed, multiphase stocks of Chicken Mountain and Black Creek (68.3–73.2 Ma), intrude Kuskokwim sediments and are linked to intermediate-felsic volcanics. Hornfelsing occurs within sedimentary and volcanic rocks adjacent to the intrusions and areas of suspected unexposed intrusion cupolas. Mineralization occurs in two settings:

- i. Bulk-tonnage, intrusion-related gold within fractured and veined late-stage phases of Chicken Mountain & Black Creek stocks, most significantly Chicken Mountain quartz monzonite.
- ii. Contact-related vein and disseminated mineralization within sedimentary and volcanic rocks, notably at the Golden Apex and Golden Hornfels zones.

Historically, 55 drill holes (6,907m) at Chicken Mountain defined a 4 km gold-in-soil anomaly in unglaciated terrain, with <50% drill-tested. Tectonic's 2023 drilling aiming to enhance historical drill data with oriented core and high-quality multi-element geochemistry, expanded the mineralized strike to 1.8 km to a 300 m depth, open in all directions. All holes intersected mineralization, 37 ending in mineralization, confirming a strong link between soil anomalies and bedrock gold.

Flat's "sea of pervasive gold" is evident in placer gold, robust soil anomalies, and drill intercepts. Core samples from the 2023 program, representing 14 intervals (6.16m), will be showcased. They illustrate veining, mineralization, and alteration within Chicken Mountain's monzonite, underscoring Flat's significant exploration potential.

Select samples from the 2023 program representing 14 intervals totalling 6.16 m highlighting the veining, mineralization and alteration styles observed within the Chicken Mountain monzonite.

TOWER RESOURCES LTD.: RABBIT NORTH PROJECT, KAMLOOPS B.C.

Stu Averill, Overburden Drilling Management Limited

Tower Resources Ltd. has been exploring its 17,526 ha Rabbit North property in the Kamloops porphyry Cu(±Au) mining district of British Columbia, midway between the district's two active mines, since 2013. Tower's initial exploration focus was on similar porphyry mineralization but changed in 2021 with the discovery of a large, shear-hosted orogenic Au system – a new deposit type for the Kamloops district.

Tower's initial 2021 gold discovery, the Lightning Zone, was followed in 2023 by the Thunder and Thunder North Zones and last October by the BlueSky Zone. All four discoveries resulted from a reconnaissance-scale till heavy mineral survey performed by ODM in May 2021. The intent of this survey was to pinpoint porphyry Cu-Au deposits hidden beneath the till using gold grain dispersal trains produced by the Au during glaciation. However, the gold grain content of the encountered trains was much higher than that of known porphyry-associated gold trains in B.C.

The four gold discoveries were made quickly and at low cost due to the precise diamond drill targeting provided by the gold grains. The Lightning Zone was discovered from scratch in just seven months and all four discoveries required only 9000 m of drilling.

The Au-bearing shear zones are strongly bleached and quartz-sericite-pyrite altered, and the gold occurs as very fine (<50 µm) particles in the pyrite rather than as visible gold grains. Tower has determined that the Au mineralization is related to the coeval injection of quartz-feldspar porphyry dykes and mineralizing fluids into shear zones at 149 Ma (Latest Jurassic) – 66 million years after the 215 Ma (Late Triassic) porphyry Cu-Au event – during the change from compressive to extensional tectonics following assembly of the Western Cordillera in the Mid-Jurassic.

Tower's display will feature core from the Lightning, Thunder North and BlueSky Zones.

WHISTLER GOLD-COPPER PROJECT: THE ROAD TO REDISCOVERY

Tim Smith and Logan Boyce, US GoldMining Inc.

The Whistler Gold-Copper Project is an advanced stage exploration project located 160 km northwest of Anchorage, Alaska, in the South Alaska Range. Exploration drilling has defined three gold-rich porphyry deposits (Whistler, Raintree, and Island Mountain) with a combined endowment of:

- Indicated Mineral Resource*: 294.5 Mt at 0.68 g/t AuEq for 6.48 million ounces (“Moz”) gold equivalent (“AuEq”)
- Inferred Mineral Resource*: 198.2 Mt at 0.65 g/t AuEq for an additional 4.16 million AuEq ounces

*See SK-1300 Technical Report, effective date September 12, 2024.

The Whistler Gold-Copper Project is underlain by Jurassic-Cretaceous flysch sediments of the Kahiltna Assemblage, which are intruded by the Whistler Igneous Suite (“WIS”) comprising diorite and monzonite intrusive rocks dated at approximately 76 Ma and overlain by equivalent extrusive assemblages consisting of calc-alkaline basalt-andesite. The Whistler Deposit is hosted within the WIS, a composite of diorite stocks and dykes that are divided broadly into an early Main Stage Porphyry (“MSP”), a later Intermineral Porphyry Suite (“IMP”) and a late intrusive phase referred to as the Late-Stage Porphyry (“LSP”). Gold and copper mineralization is characterized by abundant disseminated sulphide and quartz + sulphide vein stockworks (including porphyry diagnostic ‘A’, ‘B’, ‘D’, and ‘M’ type veins), and potassic alteration which is variably overprinted by later phyllic alteration. The early-stage MSP suite is the most strongly altered, veined and mineralized, with the IMP being less intensely altered and veined but remaining consistently mineralized. In 2023 & 2024 re-evaluation of the historical geological model was completed through database interrogation, relogging and drilling, which tested the distribution of the WIS units, a previously interpreted fault (Divide Fault) and extensions of mineralization. This resulted in significant advances to the geological model. Subsequently the mineral resource estimate was updated, resulting in 117% increase in Indicated resources.

THE ILLINOIS CREEK PROJECT: A NEW DISCOVERY IN AN EMERGING CRD DISTRICT

Sage Langston-Stewart and Andy West, Western Alaska Minerals Corp.

The Illinois Creek District located in west-central Alaska was originally discovered in the 1980's by Anaconda and is home to five evolving mineral projects containing gold, silver, copper, lead, and zinc within Western Alaska Minerals (WAM) exploration tenure. Recent focus has been on the carbonate replacement deposit (CRD) system including the past producing Illinois Creek (IC) Au-Ag oxide deposit and the high-grade Ag-Pb-Zn sulfide deposit at Waterpump Creek (WPC), which an initial inferred mineral resource estimate totaling 980 oz of AgEq was released early in 2024.

The 2024 drilling targeted two areas, the Warms Spring and LH prospects, which are along the trend between the proximal IC Au-Ag resource and the high-grade Ag-Pb-Zn WPC sulfide resource. The Warm Spring's drilling discovered a major extension of the Illinois Creek CRD system ~1.4 km southeast of the IC deposit. Seven drill holes intersected multiple pulses of mineralization including massive to semi-massive pyrite associated with gold, copper, and local silver mineralization, recrystallized ankerite associated with sphalerite (zinc) and galena (lead) mineralization, and extensive gossan (oxide). The mineralization is hosted within an intense silicification and brecciation zone that is 10x the size of Waterpump Creek, thus defining a large CRD hydrothermal system.

In addition to the 2024 drilling, WAM completed an airborne SkyTEM electromagnetic survey in collaboration with the State of Alaska as part of a larger regional survey in Western Alaska. The laterally constrained (LCI) resistivity inversions from the survey are effective in resolving the structural framework of the CRD system by identifying major aquitard fluid traps and pre-, syn-, and post mineralization faults. The 2024 drill results coupled with the new geophysical modelling and geological understanding for the district has delineated exciting targets for a successful 2025 drilling season.

WESTHAVEN GOLD CORP.

THE SHOVELNOSE GOLD PROJECT

Peter Fischl, P.Geo., Exploration Manager, Westhaven Gold. Corp.

Westhaven Gold Corp. currently operates four projects in the Spences Bridge Gold Belt, a 110-km long northwest trending belt of continental-arc volcanics of mid-Cretaceous age in south-central British Columbia. These projects host a series of syn-volcanic low sulphidation epithermal gold-silver prospects, with Westhaven's flagship property, the Shovelnose Gold Project, being the most advanced of these. The Shovelnose Project is located 30 kilometres south of Merritt, BC, and is easily accessible via Highway 5, the Coquihalla Highway of "Highway Through Hell" fame. An underground mineral resource estimate of 654,000 Indicated and 176,000 Inferred ounces, contained over a strike length of 420m.

Recent work has focussed on defining and expanding an 11km long corridor of mineralization that includes the 4.3km long Vein Zone 1 Trend, host to bonanza-bearing Franz, FMN and South Zones. The corridor has been extended to the southeast with the discovery of the Certes target, a 3km long zone of rock and soil samples anomalous in high level gold pathfinder, including antimony and mercury. Surface samples recovered here included mercury-bearing laminated and banded chalcedony, suggesting Certes may represent an epithermal system preserved in its entirety.

REYNA SILVER CORP.

REYNA SILVER'S BATOPILAS PROJECT: NATIVE SILVER AND GOLD

Lauren Megaw, VP Corporate Development, Dr. Peter Megaw, Chief Technical Advisor, Rene Ramirez, Senior Geologist, and Manuel Ruiz, Project Geologist, Reyna Silver Corp..

Reyna Silver's 1,183-ha Batopilas project in Chihuahua encompasses this historic Native Silver district, famous as Mexico's richest single silver district, historically producing over 300 Moz of Silver at an average grade of 1,500 g/t Silver.

Parallels have been drawn to the Cobalt/Gowganda District of Ontario - Canada's highest-grade silver district. Both deposits have been lumped into the category of "five-element deposit.", with only some justification.

Reyna Silver's 2023 Batopilas Project drilling program was based on a systematic year-long geological re-evaluation of the district, including mapping, sampling, structural, and geophysical studies triggered by our 2021 discovery of significant gold (3.65m grading 8 g/t Au). Gold was previously unknown from the district. Hole BA23-58 is Reyna Silver's widest intercept to date: cutting 9 metres of 616 g/t Ag within 30 metres of 218 g/t Ag starting just 3 metres from the surface. The silver mineralization in BA23-58 is predominantly acanthite in contrast to the more typical native silver in calcite mined historically and also in hole BA23-57a new, blind vein reporting 6,440 g/t Ag across 0.2m. Both intercepts came from completely covered areas revealed by the re-evaluation project, demonstrating that that significant discoveries remain to be made in this famed high-grade camp.

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PROJECT GENERATORS' HUB

AZIMUT EXPLORATION INC.

Azimut Exploration Inc. is a leading multicommodity exploration company with a solid track record for target generation and partnership development. The Company holds the largest mineral exploration portfolio in Quebec, Canada, with an exploration focus on large-scale gold, copper, nickel and lithium targets. Its strategic land position was developed by leveraging a pioneering approach to big data analytics (the AZtechMine™ expert system) and its extensive exploration know-how in the province.

Since 2004, Azimut has signed 38 strategic alliances and partnership agreements with 20 different companies. Azimut's targeting methodology is further demonstrated by recent surface and drilling discoveries, including at:

- Elmer Gold – Maiden resource estimate published in 2024 – 100% AZM
- Wabamisk Antimony / Gold – Drilling initiated Q4 2024 – 100% AZM
- Kukamas Nickel (Copper / PGEs) – Drilling initiated Q4 2024 – under option agreement
- Galinée Lithium – Drilling in 2023/2024 – JV 50% AZM

Azimut is now actively exploring with its current partners (Rio Tinto, SOQUEM, KGHM, Ophir Metals) and on several sole-funded projects. The Company is also building a pipeline of additional exploration opportunities with existing and new potential partners. Come meet the team to discuss and review potential exploration partnerships in Quebec.

EAGLE PLAINS RESOURCES

Eagle Plains Resources (EPL:TSX-V) is a British Columbia based mineral exploration project generator operating since 1992. Managed by geologists and technical staff, Eagle Plains operates over 50 exploration projects in western Canada with a focus in northern Saskatchewan and British Columbia. Project locations within these jurisdictions include the uranium rich Athabasca Basin, the porphyry fertile Quesnellia Terrane and the SEDEX potential of the Aldridge Basin in southeastern BC.

Our clientele has included senior producers to start-ups seeking a listing property. Through research, strategic acquisition and quality geoscience application, we have assembled quality precious, critical and energy-metal projects ranging from grass roots to drill ready stage with a diverse commodity profile. As part of our project generator model, we have a number of projects with requisite expenditures to qualify for listing transaction status on the CSE and TSX-V.

Deposit types include Porphyry, unconformity and basement-hosted uranium, VMS, Orogenic gold, SEDEX, Rare Earth Elements associated with alkalic igneous intrusions, syenite and uranium, vein-hosted precious- and base-metals.

Commodities include Gold, Uranium, Copper, Zinc, Molybdenum, Nickel, Light and Heavy Rare Earth Elements, Large Flake Graphite, Tungsten, Tantalum, Lithium and industrial minerals including gypsum.

In addition, Eagle Plains' wholly owned subsidiary, Terralogic Exploration Inc. provides geological consulting and technical expertise for a full spectrum of exploration projects, including preparation of NI 43-101 compliant technical reports.

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OROGEN ROYALTIES INC.

Orogen Royalties Inc. is focused on organic royalty creation and royalty acquisitions on precious and base metal discoveries in western North America. We are a team of explorers specializing in prospect generation with technical teams based in British Columbia, Nevada, and Sonora. Orogen's exploration teams focus on early-stage gold and copper targets. Our royalty portfolio includes the Ermitaño gold and silver mine in Sonora, Mexico (2% NSR royalty) (First Majestic Silver Corp.) and the Expanded Silicon Project gold project (1% NSR royalty) (AngloGold Ashanti NA), both of which Orogen identified as greenfield targets. The Company is well financed with several projects actively being explored under options.

RIVERSIDE RESOURCES

Riverside Resources is an established prospect generator with drill permitted properties, quality base metal, precious metal, and REE projects looking to partner them. Riverside can bring the technical operating capacity for projects in British Columbia, Ontario, and northern Mexico. High grade gold is one focused project type that are available for rapid exploration, discovery and financing. Written reports, developed targeting plans and exploration programs ready to go with strong potential for large scale value creation.

Riverside's business has always focused on partner programs with currently drilling with Fortuna Mining, exploring partnering with a range of companies and having full portfolios of copper and gold projects that could be combined into an integrated new and growing company or single asset deal.

STRATEGIC METALS LTD.

Strategic Metals Ltd. is a well-funded Yukon focused explorer and project generator with interests in more than 100 properties, including 18 projects under option and 13 NSR royalty interests. The Company's exploration team has long history in Yukon and are widely regarded as Yukon experts. Management has been involved in the discovery or advancement of many Yukon mineral deposits including both the highest grade > 1 million oz gold deposits and the largest copper/gold deposit.

Through its long history of Yukon focused exploration, the Company has developed close working relationships with many Yukon based contractors which can be leveraged by new option or joint venture partners, providing them with cost effective, turn-key exploration solutions.

Strategic's current property portfolio covers a wide range of commodities including but not limited to copper, cobalt, lead, zinc, gold, silver, tin, tungsten and vanadium. Projects range from early-stage exploration ideas to drill confirmed prospects to historically defined mineral resources. In 2024, Strategic's joint venture partners conducted drill programs on a large-scale copper-gold prospect as well as a high-grade gold-silver prospect as part of their respective earn-ins.

The Company has built large shareholdings in several high-quality junior explorers by optioning projects and making early-stage investments. Major shareholdings include:

- 33.4% interest in GGL Resources Corp., which recently announced an earn-in deal with Teck on a copper-molybdenum porphyry system in Nevada;
- 31.9% interest in Broden Mining Ltd., partnered with the Ross River Dena Council to develop deposits in the Faro Mining District, Yukon;
- 29.6% interest in Rockhaven Resources Ltd., advancing Klaza, one of the highest-grade gold deposits ever discovered in Yukon, towards production;
- 15.6% interest in Precipitate Gold Corp., which recently updated a 70% earn-in agreement with Barrick Gold on the Pueblo Grande project in the Dominican Republic.

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Strategic is also a seed investor and major shareholder of a promising environmental technology company: Terra CO2 Technologies. Terra was recently awarded a US\$52.6-million grant from the United States Department of Energy to establish a new manufacturing facility to produce an innovative high-performing supplementary cementitious material (“SCM”). The project will use local above-ground mine tailings from Rio Tinto’s Kennecott mine as feedstock to produce 240,000 tonnes per year of local SCM, at lower cost and 70 per cent lower emissions versus ordinary Portland cement production.

Strategic’s cash and shareholdings currently exceed its market capitalization while both Strategic and its option partners continue to advance its impressive project portfolio.

MIDLAND EXPLORATION INC.

Midland Exploration Inc. is a dynamic mineral exploration company that targets the excellent mineral potential of Quebec, Canada to make the discovery of new world-class deposits of gold and critical metals. Midland prefers to work in partnership and is proud to count major companies as such as Rio Tinto, BHP Canada Inc., Barrick Gold, Probe Gold, Wallbridge, Agnico Eagle Mines, Electric Elements Mining Corp., SOQUEM Inc., Nunavik Mineral Exploration Fund, and Abcourt Mines Inc., as partners. The Company is led by a highly respected management and technical team with a proven mine-finding track record.

Midland is currently looking for partners for its Willbob Au project located in Nunavik, Quebec, Canada about 65 kilometers west of the town of Kuujuaq. This high potential gold project is in a new emerging gold belt in the Labrador Trough and is covering more than 60 km of favorable stratigraphy and containing many gold showings (new and historical). Here are the main highlights of the project:

- Very favorable setting for orogenic Au deposits;
- Greenschist-facies rocks;
- Favorable iron-rich lithologies to precipitate gold – abundant iron-rich gabbros, diorites, iron formations, black shales;
- Polyphase deformation, abundant thrusting and folding;
- Major first-order crustal-scale structure separating older, lower grade VSED metamorphic rocks, from younger, high grade (amphibolite) metaseds rocks – Similar setting as the prolific Cadillac-Larder Lake fault in the Abitibi belt;
- Major second-order gold-bearing fault zones within the Labrador Trough;
- Syn-orogenic, polymictic conglomerates newly recognized – possibly marking major reactivated normal faults within the orogeny (similar to Timiskaming-type congloms in the Abitibi belt);
- Little previous exploration for gold – Lots of old exploration for base metals, gold was seldom analyzed;
- Many/most Au showings were found by Midland last 4 years – No IP geophysics ever done;
- Here is some of the best grab samples and intercepts:
 - SP showing: up to 419 g/t Au in quartz-pyrite-galena-sphalerite veins;
 - Wayne showing: up to 250.1 g/t Au in quartz-galena veins, 40.1 g/t Au, 32.7 g/t Au and 24.8 g/t Au in quartz-pyrrhotite veins;
 - Ants showing: 1.78 g/t Au / 23.3 m, including 3.19 g/t Au / 10.0 m (channel ANTS-18-03);
 - Ants showing: 1.81 g/t Au on 12.06 m, including 2.99 g/t Au on 4.56 m (drill hole WB-19-33);
 - Dessureault: 4.1 g/t Au / 7.6 m (historical drilling)

Midland is also looking for partners for its northern Abitibi projects, including the Samson Au-Cu project.

ABSTRACT GUIDE 2025



The Samson project is located about 40 kilometres northwest of the town of Matagami, Abitibi, Quebec, Canada. The project covers more than 10 kilometres of a series of strongly magnetic mafic to ultramafic sills located just south of the regional Lower Detour Fault.

New high-grade gold discovery in 2020 (Golden Delilah): **99.1 g/t Au over 0.4 m and 23.0 g/t Au over 1.05 m** (SAM-20-10).

For more information come to see us at the project generator hub on Wednesday and Thursday or at midlandexploration.com

MIRASOL RESOURCES

Mirasol Resources (MRZ :TSX-V) has had a successful history as a leading discovery focused exploration company in Chile and Argentina. With long-standing operations and permitting offices in Argentina and Chile Mirasol has established itself as the 'Partner of Choice' by major mining companies and local communities. Mirasol has successfully optioned properties to various mining companies in its 20-year history including Newcrest, Oceana Gold, Pan American Silver, Yamana Gold and Hochschild Mining. The most rewarding was the discovery and sale of the Joaquin project in 2012 which was put into production by Pan American Silver. Mirasol continues to advance a strong pipeline of highly prospective early and mid-stage projects.

The recent advancements by Filo del Sol and NGEEx have built significant interest in copper exploration in the Vicuna District of northern Argentina and Chile from major mining companies and investors. Prior to the exciting results from Filo del Sol, Mirasol had identified and staked the Sobek Project based on the prospective local structural architecture in one the world's most endowed regions for giant magmatic-hydrothermal ore deposits. Sobek is located just 7km west of Filo Del Sol and only 3km west of NGEEx's discovery at Lunahuasi. Multiple priority copper-porphyry targets have been identified on the property based on coincident geological structure, airborne mobile MT geophysical results and geochemical soil sampling and select surface rockchip anomalies. Mirasol has initiated a drill campaign at the first of two targets scheduled for testing this year. Drilling the Potro SE target on Sobek North was completed late last year and drilling at Sobek 46 target on Sobek Central is planned for late Q1 2025.

For more information on Mirasol and our projects visit our website at mirasolresources.com or contact us at contact@mirasolresources.com.

MUNDORO CAPITAL

Mundoro is a publicly listed company on the TSX-V in Canada and OTCQB in the USA with a portfolio of mineral properties focused primarily on base and precious metals. The portfolio of mineral properties is currently focused on predominantly copper in two mineral districts: Western Tethyan Belt in Eastern Europe and the Laramide Belt in the southwest USA. To drive value for shareholders, Mundoro's asset portfolio generates near-term cash payments to Mundoro and creates royalties attached to each mineral property optioned to partners. Currently, Mundoro has three partnered projects with BHP in Serbia, one partnered project with JOGMEC in Bulgaria, and six additional projects which are available for option in Serbia and the USA.