Exploration and mining in the Northwest Region, British Columbia

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1. Introduction

The Northwest Region has a long history of mining and is prospective for a wide range of commodities including precious metals, base metals, and coal. This region includes about 263,000 km^2 of British Columbia, approximately 25% of the province (Fig. 1). Mineral exploration is concentrated in a loosely defined area in the northern part of the region popularly known as the 'Golden Triangle'; several other projects were underway to the southeast. Increased financing of many projects due to high metal prices in 2021 helped finance 2022 exploration.

Estimates for exploration expenditures, drilling programs, and other metrics were captured in the British Columbia Mineral and Coal Exploration Survey, a joint initiative of the Province of British Columbia Ministry of Energy, Mines and Low Carbon Innovation, the Association for Mineral Exploration in British Columbia, and EY LLP. For the Northwest Region, exploration expenditures were estimated at $450.8 million and exploration drilling was estimated at 661,440 m (Clarke et al., 2023; EY LLP, 2023).

The Northwest Region contains two operating metal mines (**Brucejack** and **Red Chris**). The region also contains five proposed metal mines (**Dome Mountain, Galore Creek, KSM, Kutcho** and **Red Mountain**), and one proposed coal mine (**Tenas**). There is one mine development project (**Premier Gold**). Numerous grass roots, early- to advanced-stage projects were tracked, and selected projects are discussed below. Large industrial projects in the region are driving demand for aggregate, and placer gold mining continues throughout the region. Small-scale jade mining, both in situ and placer, has a long history in the region. However, in 2021 a provincial government Order in Council was announced restricting jade mining until at least May 11, 2023.

Noteworthy acquisitions, earn ins, and proposed mergers were announced in 2022. The most significant was the completed purchase of Pretium Resources Inc. by Newcrest Mining Limited for approximately $3.5 billion. Skeena Resources acquired Quest Ex Copper & Gold Ltd. for $48.6 million and made a concurrent sale of several of the Quest Ex Properties (Heart Peaks, Castle, Moat, Coyote, and North ROK properties) to Newmont Corporation for $26 Million. Another notable deal was the completed acquisition of Fury Gold Mines Ltd.'s wholly owned subsidiary Homestake Resource Corporation by Dolly Varden Silver Corp. Homestakes's adjacent tenure was consolidated with Dolly Varden's, Dolly Varden project to form the new **Kitsault Valley** project.

2. Geological overview

Metallogeny in British Columbia is intimately linked to the tectonic evolution of the Canadian Cordillera. First as an accretionary orogen consisting of allochthonous terranes that were welded to, and deformed with, the western margin of Ancestral North America, primarily in the Jurassic, then as the site of post-accretionary tectonism and magmatism (e.g., Nelson et al., 2013). The Northwest Region provides a transect across the Cordilleran orogen (Fig. 1) with several distinct tectonostratigraphic terranes. From east to west the region is underlain by: 1) autochthonous and parautochthonous carbonate and siliciclastic strata deposited on the flank of Ancestral North America (Laurentia); 2) the Intermontane terranes, including the Slide Mountain terrane (back-arc basin); the Yukon-Tanana terrane (a rifted Devonian pericratonic arc); the Quesnel and Stikine volcanic arc terranes (formed outboard of Ancestral North America starting in the Late Paleozoic and accreted in the Middle Jurassic); and the Cache Creek oceanic terrane, which intervenes between Quesnellia and Stikinia; 3) the Alexander terrane; 4) post-accretionary rocks; and 5) younger cover rocks. The allochthonous terranes initially accreted to each other and to western North America in the Jurassic. Since then, the region has been intruded by post-accretion plutonic suites and covered, in part, by Jurassic and younger syn- and post-accretionary siliciclastic deposits. For details about the geology, metallogeny, and tectonics of the Northwest Region see Nelson et al. (2013) and Colpron and Nelson (2021).

3. Mines and quarries

In 2022, two metal mines operated in the Northwest Region (**Brucejack** and **Red Chris**). One industrial mineral mine and numerous aggregate operations supplied large-scale industrial projects and local townships throughout the region (Fig. 1;

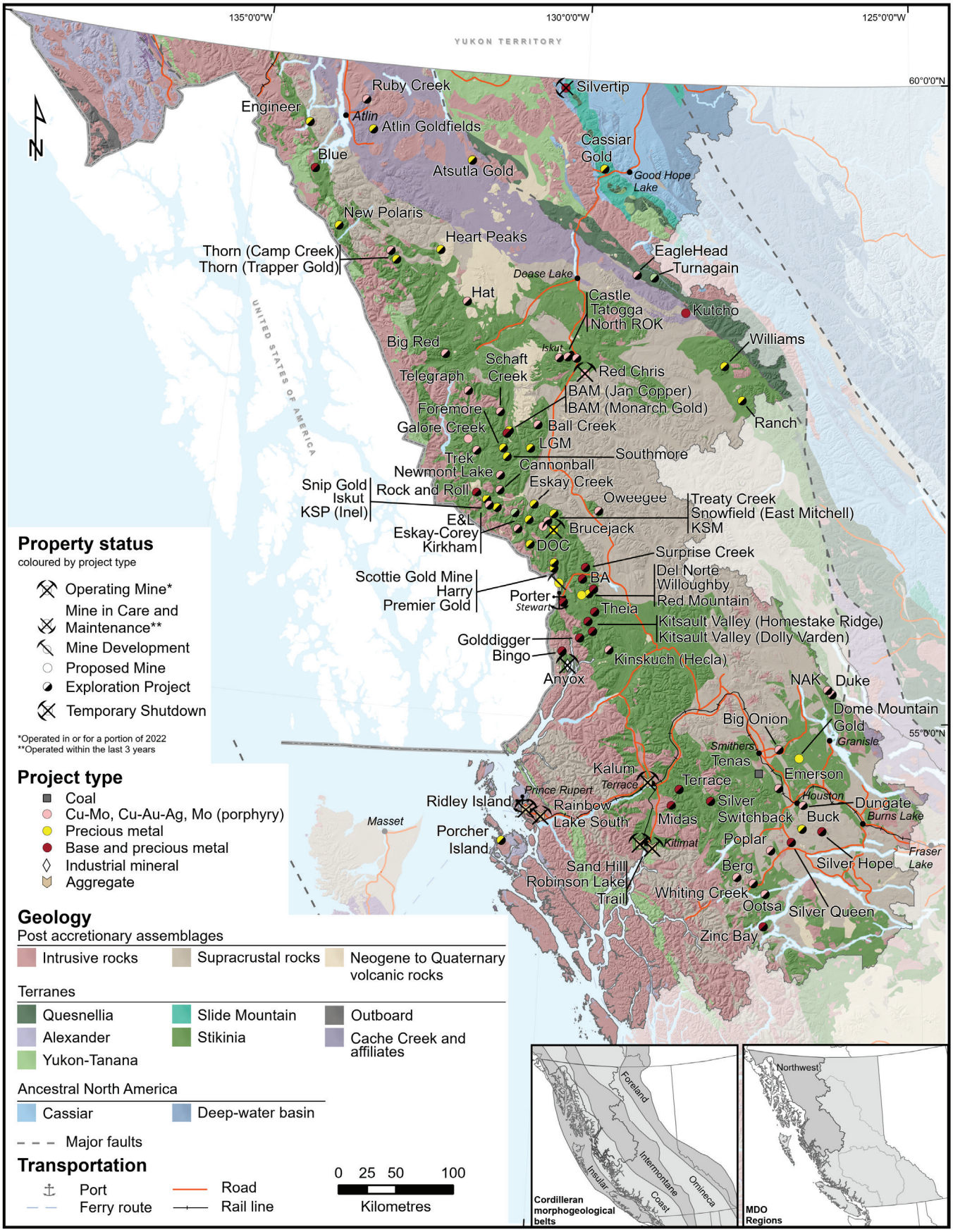

Fig. 1. Mines, proposed mines, and selected exploration projects, Northwest Region, 2022. Terranes after Nelson et al. (2013).

Tables 1, 2). Placer gold mining is ongoing, predominantly in the Atlin and Turnagain areas.

3.1. Metal mines

The **Brucejack** and **Red Chris** mines operated in 2022 (Fig. 1; Table 1).

3.1.1. Brucejack (Newcrest Mining Limited)

The **Brucejack** gold-silver mine operated throughout 2022. Newcrest Mining Limited finalized acquisition of Pretium Resources Inc. for approximately $3.5 billion in March, which included the Brucejack mine. The underground mine is accessed by a 75 km all-season mining road off Highway 37; the last 12 km of road are across the Knipple glacier. A 57 km-long transmission line built specifically for the mine supplies the power. Production for the first three quarters totalled 237,274 oz of Au at a head grade of 7.53 g/t Au and approximately 361,500 oz Ag. Work is in progress to revise ore resources and reserves estimates. As of January 1, 2021, Pretium reported Indicated and Measured mineral resources totalling 22.5 Mt grading 10.0 g/t Au and 67.5 g/t Ag. Proven and Probable mineral reserves were reported as 14.4 Mt grading 8.3 g/t Au and 63.8 g/t Ag.

The Brucejack ore body incorporates the Valley of the Kings (VOK) and West zones. Several other mineralized zones in phyllic-altered rocks extend across an area 5 by 1.5 km (from south to north: Bridge, Waterloo, Shore, SG, Gossan Hill, Golden Marmot, and Hanging Glacier). Interpreted as an intermediate-sulphidation epithermal gold-silver deposit, mineralization is in sheeted veins, breccia veins, and vein stockworks that cut Lower Jurassic metasedimentary and volcanic rocks of the Hazelton Group. Gold and silver at both the VOK and West zones are mainly in electrum and lesser sulphosalts (Fig. 2). Chalcopyrite, galena, and sphalerite are also common. Brownfields exploration at Brucejack totalled 31,800 m in 74 diamond-drill holes. Drilling at the 1080 HBx zone has expanded the VOK deposit, confirming the continuity of high-grade mineralization at depth. Results include 1.0 m grading 3876 g/t Au in a 22 m interval grading 178 g/t Au, and 1.0 m grading 2310 g/t Au in a 70.1 m interval grading 35 g/t Au. Golden Marmot zone results included 1.0 m grading 488 g/t Au in 46.5 m interval grading 16 g/t Au.

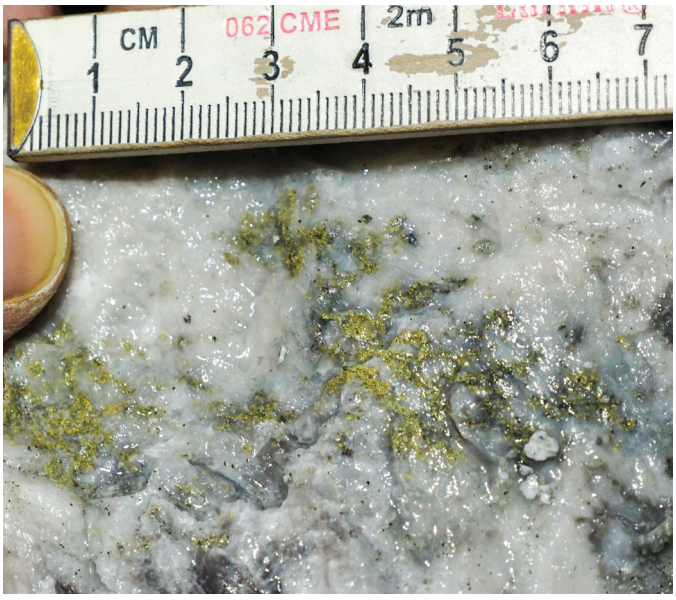

Fig. 2. Electrum mineralization in quartz veins at Brucejack underground mine.

3.1.2. Red Chris (Newcrest Mining Limited 70% and Imperial Metals Ltd. 30%)

The **Red Chris** open-pit copper-gold mine (Fig. 3) is 17 km east-southeast of the community of Iskut and is accessed from Highway 37. The Northwest Transmission Line powers the site. Production to the end of the third quarter of 2022 totalled 49,141 oz Au and 54.5 Mlbs Cu. A new mineral resource estimate was released with 342 Mt of Measured and Indicated, grading 0.3 g/t Au, 0.36% Cu, and 16 Mt of Inferred, grading 0.23 g/t Au, 0.27% Cu. The Red Chris underground block cave resource is reported as 957 Mt of Measured and Indicated, grading 0.46 g/t Au, 0.4% Cu, and 257 Mt of Inferred, grading 0.32 g/t Au, 0.30% Cu.

The deposit is hosted by the Red stock (U-Pb zircon 203.8 Ma; Rees et al., 2015), which intrudes and alters Upper Triassic Stuhini Group rocks, and is faulted against Middle Jurassic rocks of the Bowser Lake Group. Rees et al. (2015) described multiple igneous phases, alteration, and controls on mineralization.

Drilling at East Ridge continued to intersect high-grade mineralization confirming continuity and extension of the resource. Results included 222 m grading 0.44 g/t Au and 0.61% Cu, 334 m grading 0.35 g/t Au, and 0.50% Cu, 334 m grading 0.35 g/t Au, 0.50% Cu, including 56 m grading 0.83 g/t Au, 0.80% Cu, and 22 m grading 1.1 g/t Au and 0.93% Cu. Block cave underground mine operation plans are on track with early works advancing.

Fig. 3. Open pit mine, main zone, Red Chris mine.

3.2. Coal mines

In 2022, no coal mines operated in the Northwest Region; the Tenas project is listed as a proposed mine (Section 6.2.1.).

3.3. Industrial mineral mines and quarries

Tru-Grit Abrasives (Fig. 1; Table 2) is recycling slag at the historic Anyox site, where slag was created from smelting copper. The slag is mined, cleaned, separated, and barged

Table 1. Metal mines, Northwest Region.

Mine	Operator (partner)	Commodity; Deposit type; MINFILE	Forecast 2022 Production (based on Q1-Q3)	Reserves	Resources	Comments
Brucejack	**Newcrest Mining Limited**	Au, Ag; Epithermal; 104B 193	323,380 oz Au 482,049 oz Ag	P+Pr: 14.4 Mt 8.3 g/t Au, 63.8 g/t Ag	M+I: 22.5 Mt 10.0 g/t Au, 67.5 g/t Ag Inf: 9.4 Mt 10.3 g/t Au, 44.3 g/t Ag (Pretium, 2021)	31,800 m in 74 drill holes in brownfields exploration. Drilling at 1080 HBx zone expanded the VOK deposit. Results include 1.0 m grading 3876 g/t Au within 22 m grading 178 g/t Au, 1.0 m intersection grading 2310 g/t Au within 70.1 m grading 35 g/t Au. Golden Marmot zone results included 1.0 m grading 488 g/t Au within 46.5 m grading 16 g/t Au. Newcrest Mining Limited finalized acquisition of Pretium for $3.5 billion.
Red Chris	**Newcrest Mining Limited 70%**, Imperial Metals Corp. 30%	Cu, Au, Ag; Hybrid calc-alkalic to alkalic porphyry; 104H 005	72.66 Mlbs Cu 65,524 oz Au 215,705 oz Ag	P+Pr: 75.7 Mt 0.45% Cu, 0.39 g/t Au Red Chris Underground P+Pr: 586 Mt 0.45% Cu, 0.55 g/t Au	M+I: 342 Mt 0.36% Cu, 0.3 g/t Au Inf: 16 Mt 0.27% Cu, 0.23 g/t Au Red Chris Underground M+I: 957 Mt 0.4% Cu, 0.46 g/t Au Inf: 257 Mt 0.30% Cu, 0.32 g/t Au (June 2022)	Drilling at East Ridge continued to intersect high-grade mineralization. Results included 222 m grading 0.44 g/t Au and 0.61% Cu, 334 m grading 0.35 g/t Au, 0.50% Cu, 334 m grading 0.35 g/t Au, 0.50% Cu, including 56 m grading 0.83 g/t Au, 0.80% Cu, and 22 m grading 1.1 g/t Au, 0.93% Cu. Block cave mining development on track.

P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

Table 2. Selected industrial mineral and aggregate mines and quarries, Northwest Region.

Mine	Operator (partner)	Commodity; Deposit type; MINFILE	Forecast 2022 Production (based on Q1-Q3)	Reserves	Resources	Comments
Anyox	**Tru-Grit Abrasives**	Slag steel	unknown	na	na	Slag is mined, cleaned, and barged for roofing and sand for sand blasting.

Table 2. Continued.

Kalum	**Kalum Quarry Ltd.**	Industrial rock; Crushed rock	unknown	na	na	Drilling, blasting, crushing, production for CN Railway and others.
Rainbow Lake South	**Spring Creek Aggregates Ltd.**	Industrial rock; Crushed rock	unknown	na	na	Drilling, blasting, crushing, production for CN Railway and LNG projects.
Ridley Island	**Terus Construction Ltd.**	Industrial rock; Crushed rock	unknown	na	na	Drilling, blasting, crushing, production for CN Railway and LNG projects.
Robinson Lake Trail	**Haisla & Progressive Ventures Construction Ltd.**	Industrial rock; Crushed rock	unknown	na	na	Drilling, blasting, crushing, production for CN Railway and LNG projects.
Sand Hill	**Terus Construction Ltd.**	Industrial rock; Crushed rock	unknown	na	na	Crushing for CN Railway and LNG projects.

P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

south for roof shingles and sand blasting; the material is also used to add iron into Portland cement. The operation has been active for more than 30 years and more than 2.5 Mt has been reclaimed from the 4.5 Mt abandoned by smelting operations in the 1930s.

3.4. Aggregate and industrial rock quarries

Numerous aggregate and quarry operations supply sand and gravel and blasted stone for large-scale industrial projects and municipalities throughout the region (Fig. 1; Table 2). Several large aggregate pits operate near Kitimat (**Robinson Lake Trail** and **Sand Hill**) and others operate near Prince Rupert (**Ridley Island** and **Rainbow Lake South**). Owned by the Kitsumkalum First Nation's, **Kalum** is an industrial rock quarry. It is the only pit in the region with a rail spur, and it supplies the Canadian National Railway Company with ballast.

4. Placer operations

Placer gold mining operations have been ongoing for more than a century in the Northwest Region and continue today with a focus in the Atlin and Turnagain areas and, to a lesser extent, north of Dease Lake and near Cassiar. Due to the large number of operations and difficulty in obtaining information, these projects are not tracked.

5. Mine development

When a project acquires the necessary permits including (Mines Act permit from the Ministry of Energy, Mines and Low Carbon Innovation and an Environmental Management Act permit from the Ministry of Environment) and begins mine construction, the mine development stage is reached. The Northwest Region has one mine development project (Fig. 1; Table 3).

5.1. Premier Gold (Ascot Resources Ltd.)

Ascot Resources Ltd. received a Mines Act permit for construction and operation of their **Premier Gold** mine project in 2021. Plant pre-commissioning is on schedule and planned to start in Q4 2023 with first gold pour expected in early 2024.

Ascot carried out 13,685 m of exploration drilling in 91 holes near existing defined resources. Highlight exploration drilling results included 7.90 m grading 62.76 g/t Au, and 27.36 g/t Ag, with a 1.0 m interval grading 488.00 g/t Au, and 181.00 g/t Ag, 10.69 m grading 31.92 g/t Au, and 22.21 g/t Ag with a 1 m interval of 330.00 g/t Au, and 192.00 g/t Ag, 12 m grading 5.09 g/t Au, and 6.60 g/t Ag, with a 7.5 m interval of 7.17 g/t Au, 6.70 g/t Ag.

The Premier underground mine operated between 1918 and 1952 and was one of the largest gold mines in North America, producing 2 Moz Au and 45 Moz Ag. Mineralization is hosted by andesitic tuffs, lapilli tuffs, and andesitic flows of the Unuk River Formation (Hazelton Group) that are cut by early Jurassic calc-alkaline plutons of the Texas Creek suite. The principal gold-bearing mineral is electrum in quartz breccias, veins, and stockworks generally surrounded by an alteration envelope of quartz-sericite-pyrite. Base metal mineralization is also present in quartz veins, as sphalerite and galena associated with argentite and freibergite. The nature of mineralization and metal composition suggest an intermediate-sulphidation epithermal genesis.

Table 3. Mine development projects, Northwest Region.

Project	Operator (partner)	Commodity; Deposit type; MINFILE	Reserves	Resources	Comments
Premier Gold	**Ascot Resources Ltd.**	Au, Ag; Epithermal; 104B 054	P+Pr: 3.63 Mt 5.45 g/t Au, 19.1 g/t Ag	I: 4.14 Mt 8.01 g/t Au, 35.1 g/t Ag Inf: 5.06 Mt 7.25 g/t Au, 28.7 g/t Ag	13,685 m of exploration drilling in 91 holes. Plant pre-commissioning to start in Q4 2023 and first gold pour expected in early 2024. Highlight drilling results of 7.90 m grading 62.76 g/t Au, 27.36 g/t Ag, including 1.0 m of 488.00 g/t Au, 181.00 g/t Ag. 10.69 m grading 31.92 g/t Au, 22.21 g/t Ag including 1 m of 330.00 g/t Au, 192.00 g/t Ag. 12 m grading 5.09 g/t Au, 6.60 g/t Ag, including 7.5 m of 7.17 g/t Au, 6.70 g/t Ag.

P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

6. Proposed mines or quarries

Proposed mines are feasibility-stage projects for which proponents have begun or completed the environmental certification process (generally for late-stage projects) or have submitted or received approvals for Mines Act permits (for projects below British Columbia Environmental Assessment Act thresholds). The Northwest Region contains five proposed metal mines and one proposed coal mine (Fig. 1; Table 4).

6.1. Proposed metal mines

The Northwest Region contains five proposed metal mines. **Galore Creek**, **KSM** and **Red Mountain** have been granted an Environmental Assessment Certificate and the **Kutcho** project is in the environmental assessment process with the Environmental Assessment Office. The **Dome Mountain Gold** project has both an Environmental Management Act Permit and a Mining Permit, that would allow annual production of up to 75,000 t.

6.1.1. Dome Mountain Gold (Blue Lagoon Resources Inc.)

The **Dome Mountain Gold** project contains a Measured resource (January 2022) of 136,000 t grading 10.32 g/t Au, 57.31 g/t Ag, an Indicated resource of 662,000 t grading 8.15 g/t Au, 41.19 g/t Ag, and an Inferred resource of 85,000 t grading 6.02 g/t Au, 26.13 g/t Ag (with a cut and fill method at 3.5 g/t Au cut off).

Orogenic gold-silver mineralization is mainly in two zones (the Boulder vein and Argillite vein systems) in fragmental volcanic rocks of the Telkwa Formation and basalts and altered volcanic rocks of the Nilkitkwa Formation. In addition to the large vein systems, more than a dozen other mineralized veins occur, mostly striking east-west and northwest-southeast. Veins (0.7 to 4.5 m wide) contain quartz±calcite±ankerite with lesser sulphide mineralization. Alteration is positively correlated with gold and consists of abundant carbonate-sericite-pyrite that envelopes veins. Base metal sulphide mineralization is associated with higher gold and silver grades (Fig. 4).

Blue Lagoon carried out 19,500 m of drilling in 65 holes with drilling in new zones including the Chance structural zone. Highlights from the Chance zone include 0.41 m grading 126 g/t Au and 404 g/t Ag, in 1.73 m interval grading 30.67 g/t Au, and 99.26 g/t Ag, 0.50 m grading 12.2 g/t Au, 100 g/t Ag, in a 7.42 m interval grading 1.98 g/t Au and 15.02 g/t Ag. Boulder vein system results include 0.39 m grading 86.20 g/t Au and 1280 g/t Ag in a 1.09 m interval grading 31.67 g/t Au and 473.0 g/t Ag.

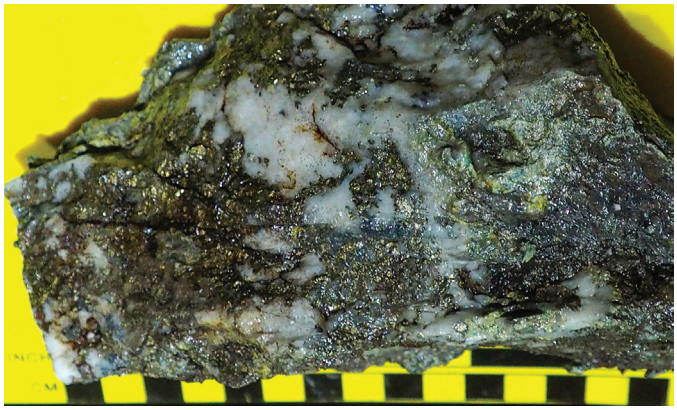

Fig. 4. Semi-massive sulphide mineralization from the Argillite Quartz vein system at Dome Mountain.

6.1.2. Galore Creek (Galore Creek Mining Corporation)

The **Galore Creek** copper-gold project (Fig. 5) is operated by the Galore Creek Mining Corporation and is jointly owned by Teck Resources Limited and Newmont Corporation. The project is 70 km west of the Bob Quinn airstrip adjacent to Highway 37, where a mine access road has been partially constructed.

Table 4. Selected proposed mines, Northwest Region.

Project	Operator (partner)	Commodity; Deposit type; MINFILE	Reserves	Resources	Comments
Dome Mountain	**Blue Lagoon Resources Inc.**	Au, Ag; Au-quartz veins; 093L 276	na	M:136, 000 t 10.32 g/t Au, 57.31 g/t Ag I: 662,000 t 8.15 g/t Au, 41.19 g/t Ag Inf: 85,000 t 6.02 g/t Au, 26.13 g/t Ag (resource based on cut and fill method at 3.5 g/t Au cut off) (January 2022)	19,500 m of drilling in 65 holes. Highlights from the Chance structural zone include 0.41 m grading 126 g/t Au and 404 g/t Ag, within 1.73 m grading 30.67 g/t Au, and 99.26 g/t Ag. 0.50 m 12.2 g/t Au, 100 g/t Ag, within 7.42 m grading 1.98 g/t Au and 15.02 g/t Ag. Boulder vein system results include 1.09 m grading 31.67 g/t Au and 473.0 g/t Ag including 0.39 m grading 86.20 g/t Au and 1280 g/t Ag.
Galore Creek	**Galore Creek Mining Corp. (Teck Resources Ltd. 50%, Newmont Corporation 50%)**	Cu, Au, Ag; Alkaline porphyry; 104G 090	P+Pr: 528 Mt 0.59% Cu, 0.32 g/t Au, 6.02 g/t Ag	M+I: 1.103 Bt 0.47% Cu, 0.26 g/t Au, 4.2 g/t Ag Inf: 198 Mt 0.27% Cu, 0.21 g/t Au, 2.7 g/t Ag	Prospecting, mapping, rock sampling; engineering and environmental studies for prefeasibility study.
KSM	**Seabridge Gold Inc.**	Cu, Au, Ag, Mo; Porphyry Cu±Mo±Au; 104B 191	P+Pr: 2.292 Bt 0.64 g/t Au, 0.14% Cu, 2.2 g/t Ag, 76 g/t Mo	M+I: 5.357 Bt 0.51 g/t Au, 0.16% Cu, 2.4 g/t Ag, 63 g/t Mo Inf: 5.685 Bt 0.36 g/t Au, 0.28% Cu, 2.2 g/t Ag, 33 g/t Mo (Total for KSM deposits)	PFS plan with an open pit only plan of a 33 year mine life limited to the Mitchell, East Mitchell, and Sulphurets deposits. PEA with an underground block cave mining operation supplemented with a small open pit. Plan to operate for 39 years. Construction at KSM. Installation of the Bell-Irving River Bridge completed. 6200 metres of geotechnical drilling.
Kutcho	**Kutcho Copper Corp.**	Cu, Pb, Zn; Noranda/Kuroko VMS; 104I 060	Pr: 17.3 Mt 1.58% Cu, 2.31% Zn, 27.9 g/t Ag, 0.39 g/t Au	M+I: 22.8 Mt 1.52% Cu, 2.18% Zn, 0.39 g/t Au, 28.1 g/t Ag Inf: 12.9 Mt 1.10% Cu, 1.58% Zn, 0.25 g/t Au, 20.0 g/t Ag	Started First Nation and community engagement and consultations, completing economic participation agreements with both the Tahltan and Kaska First Nations.
Red Mountain	**Ascot Resources Ltd.**	Au, Ag; Subvolcanic and precious metal veins; 103P 086	P+Pr: 2.54 Mt 6.52 g/t Au, 20.60 g/t Ag	M+I: 3.19 Mt 7.63 g/t Au, 21.02 g/t Ag Inf: 0.41 Mt 5.32 g/t Au, 7.33 g/t Ag	Environmental baseline monitoring.
Tenas	**Allegiance Coal Ltd. 95%**, Itochu Corp. 5%	PCI; Bituminous coal; 093L 156	P+Pr: 62.9 Mt coal	M+I: 124.6 Mt Inf: 1.2 Mt	In the Environmental Assessment application process with baseline studies ongoing. Proposed production 775-825 kt of steelmaking coal annually with a mine-life of 22 years.

P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

HCC = hard coking coal; PCI = pulverized coal injection; TC = thermal coal

Fig. 5. The Galore Creek deposit footprint and Uhtlan camp below Mount Scotsimpson; view to the southwest.

The Galore Creek alkalic complex includes multiphase syenite, monzonite, and monzodiorite dikes and stocks that cut volcanic and sedimentary rocks of the Stuhini Group. Mineralization is thought to be at the endmember of the silica-undersaturated porphyry Cu-Au deposit type. At the Central zone (the principal economic resource) initial potassic alteration and gold-copper and sulphide mineralization formed from highly oxidized fluids. Hydrothermal processes during the second period generated calcic alteration and brecciation, followed by potassic alteration and mineralization of bornite and chalcopyrite (Micko et al., 2014).

The Galore Creek project contains a Proven and Probable reserve of 528 Mt grading 0.59% Cu, 0.32 g/t Au, and 6.02 g/t Ag. It has a Measured plus Indicated resource (September 2014) of 1.103 Bt grading 0.47% Cu, 0.26 g/t Au, and 4.2 g/t Ag, with an additional Inferred resource of 198 Mt grading 0.27% Cu, 0.21 g/t Au, and 2.7 g/t Ag. Exploration in 2022 consisted of mapping, prospecting, rock sampling, and excavating test pits. The company focussed on engineering work for an ongoing prefeasibility study and environmental studies.

6.1.3. KSM (Seabridge Gold Inc.)

The **KSM** project consists of five porphyry Cu-Au deposits: Kerr, Sulphurets, Mitchell, East Mitchell (Snowfield) and Iron Cap. It is the largest undeveloped gold project in the world by resources: Measured and Indicated resources (August 2022) of 5.357 Bt grading 0.51 g/t Au, 0.16% Cu, 2.4 g/t Ag, and 63 g/t Mo and an Inferred resource of 5.685 Bt grading 0.36 g/t Au, 0.28% Cu, 2.2 g/t Ag, and 33 g/t Mo. The total KSM Proven and Probable reserves are 2.292 Bt grading 0.64 g/t Au, 0.14% Cu, 2.2 g/t Ag, and 76 g/t Mo.

The company released a prefeasibility study plan with a 33-year mine life. The plan was limited to the Mitchell, East Mitchell, and Sulphurets deposits and considered an open-pit operation only. A Preliminary Economic Assessment was reported with an underground block cave mining operation supplemented with a small open pit. It has a separate plan to operate for 39 years with a peak mill feed production of 170,000 t/d. The Preliminary Economic Assessment and Pre-Feasibility study added substantial resources to Mineral Resource and Reserves compared to previous reports. Geotechnical drilling totalling 6200 m was completed for engineering studies. Seabridge continued its early construction activities at KSM with installation of the Bell-Irving River Bridge. The bridge will provide permanent access to KSM's process plant and tailings facility areas.

KSM is part of the Sulphurets district, which contains abundant porphyry Cu-Au and related systems along a 200 km-long north-northwest trending corridor in northwestern Stikinia (Febbo et al., 2019). Four phases of calc-alkaline porphyry Cu-Au-Mo mineralization at KSM are genetically related to dioritic intrusions of the Sulphurets suite (Febbo et al., 2015), with the deposits distributed along a 12 km-long north-striking linear array. The intrusions cut volcanosedimentary rocks of the Stuhini Group (Upper Triassic) sandstones, conglomerates, and andesitic rocks of the Jack Formation, a basal unit of the Hazelton Group (Upper Triassic to Lower Jurassic). Mineralization is disseminated in sheeted quartz veinlets and clustered quartz-vein stockworks and is open at depth.

6.1.4. Kutcho (Kutcho Copper Corp.)

The **Kutcho** project is accessible by a 100 km-long seasonal gravel road and an airstrip 10 km from the deposit. Kutcho Copper Corp. entered the environmental assessment process late in 2019 and has received a Section 11 Order that defines the scope of the assessment and the Indigenous Nations that the company will engage with. The project is not required to undertake a federal environmental assessment.

The project includes three main zones: Main, Esso, and Sumac. Considered to be a Kuroko-type volcanic massive sulphide deposit, the Cu-Zn-Au-Ag mineralization is in felsic and largely fragmental volcanic rocks in the upper part of the Kutcho Formation, a Permian-Triassic unit of bimodal volcanic rocks. Reported Proven and Probable mineral reserves (July, 2021) are 17.3 Mt grading 1.58% Cu, 2.31% Zn, 27.9 g/t Ag, 0.39 g/t Au. Measured and Indicated mineral resources (inclusive of reserves) are reported as 22.8 Mt grading 1.52% Cu, 2.18% Zn, 28.1 g/t Ag, and 0.39 g/t Au. A Feasibility Study announced favourable economics using US$3.50/lb Cu and US$1.15/lb Zn. The project would have a combined eleven-year open pit and underground mine life.

6.1.5. Red Mountain (Ascot Resources Ltd.)

Red Mountain is a proposed underground mine 18 km east-northeast of Stewart. Discovered in 1989, the project has had extensive exploration since, including 466 diamond-drill holes and more than 2 km of underground development. A provincial and federal Environmental Assessment Certificate was received in 2018. The project was purchased by Ascot Resources from IDM Mining in 2019 for $45 million and a Feasibility Study was completed in 2020. Red Mountain contains Measured and

Indicated resources (April 2020) of 3.19 Mt grading 7.63 g/t Au and 21.02 g/t Ag and an Inferred resource of 405,000 t grading 5.32 g/t Au and 7.33 g/t Ag (reported at 3.0 g/t Au cut off for long hole stoping).

The property is underlain by Upper Triassic-Lower Jurassic metasedimentary and volcanic rocks that were intruded by a multi-phased intermediate intrusive complex. Gold occurs in pyrite-rich brecciated bodies and stockworks along the margins of the intrusive rocks, with low-temperature quartz-sericite-pyrite (phyllic) alteration containing high-grade gold and high-temperature K-feldspar alteration.

Environmental baseline monitoring continued, but minimal exploration work was done on the project as Ascot concentrated on development and construction at the Premier Gold project.

6.2. Proposed coal mines

There is currently one proposed coal mine, Allegiance Coal Limited's **Tenas** project.

6.2.1. Tenas (Allegiance Coal Ltd. 90%, Itochu Corp. 10%)

Telkwa Coal Ltd., a subsidiary of Allegiance Coal Ltd., is proposing to develop the **Tenas** project, which is accessible by road, approximately 17 km south of Smithers. The project entered the provincial environmental assessment process in 2018 and the project proposes to produce approximately 775,000-825,000 t of steelmaking coal annually with a mine-life of 22 years. In 2017, Allegiance Coal Ltd. released a reserve estimate of Proven plus Probable reserves of 62.9 Mt of coal.

At least 14 coal seams have been recognized in the Skeena Group (Lower-Upper Cretaceous) with individual seams up to 7.6 m thick. Currently there are four conceptual pits (from south to north: Tenas, Goathorn West, Goathorn East, and Telkwa North) on approximately 1050 ha. The current environmental assessment application is only for production of metallurgical coal from the Tenas pit. Proven plus Probable reserves for Tenas are 29.1 Mt. In 2022, Telkwa filed their application for an Environmental Assessment Certificate.

7. Selected exploration activities and highlights

Exploration projects are described on a continuum from early to advanced stages. The earliest stages are considered grassroots. Typically, where the collection of rock and soil samples are collected for geochemical analysis, commonly in conjunction with regional geological mapping and geophysical surveys. This preliminary work is used to generate targets to test, usually by drilling. At these early stages, it is a common practice to establish base-line environmental testing and engage with communities and First Nations. As a project progresses, drilling may delineate a mineral resource and establish baseline economics. Later stages of exploration generally coincide with mine evaluation, feasibility, and economic studies, which include environmental, social, engineering, and financial considerations.

7.1. Selected precious metal projects

The Northwest Region has numerous precious metal projects (Fig. 1; Table 5), many of which are in the loosely defined area popularly known as the Golden Triangle.

7.1.1. Atlin Goldfields (Pacific Bay Minerals Ltd.)

Pacific Bay has entered an option agreement with Brixton Metals Corp. to acquire 100% interest in the **Atlin Goldfields** project near Atlin. Pacific Bay can earn-in by paying Brixton $3,225,000 in cash, issuing to Brixton 10,000,000 Pacific Bay common shares, and incurring $7 million in exploration expenditures in seven years, with Brixton retaining a 2% net smelter return. Diamond drilling totalling 250 m was carried out in two holes. Initial results included 3.05 m grading 9.96 g/t Au in the Yellowjacket main zone.

7.1.2. Atsutla Gold (Trailbreaker Resources Ltd.)

At the **Atsutla Gold** project, exploration included geological mapping, prospecting, soil, and rock sampling, which identified a new high-grade mineralized zone referred to as the Snook zone. Rock sample results include 55 g/t Au, 78 g/t Au, and 11.7 g/t Au, 212 g/t Ag, and 0.12% Cu.

7.1.3. BAM (Monarch Gold) (P2 Gold Inc.)

P2 Gold Inc. drilled 95 holes totalling 13,967 m at their BAM project. Most drilling was on or surrounding the Monarch Gold zone. Results included 7.0 m grading 5.63 g/t Au, 80.0 m grading 1.38 g/t Au, with a 12.2 m interval grading 2.43 g/t Au. Work also included an airborne ZTEM geophysical survey.

7.1.4. Buck (Sun Summit Minerals Corp.)

Sun Summit Minerals Corp.'s 15,000 ha **Buck** property is accessible by an all-season road 12 km south of Houston. The property is underlain by andesitic to rhyolitic tuffs, flows, and breccias of the Hazelton Group (Upper Triassic to Lower Jurassic). Sulphides occur in veinlets, disseminations, or coarse fracture fillings, mainly in rhyolitic breccias. Sun Summit carried out 7000 m of drilling in 17 holes targeting high-grade and bulk tonnage gold mineralization. Exploration work included soil sampling, 34 line-km of IP, and a property-wide airborne VTEM survey. The geophysical surveys identified anomalies including a new drill target. Drill results included 1.0 m grading 26.5 g/t Au, and 199 g/t Ag in a 13.2 m interval grading 2.75 g/t Au and 22.99 g/t Ag, 1.9 m grading 3.16 g/t Au and 82.92 g/t Ag in a 10.3 m interval grading 1.11 g/t Au and 25.89 g/t Ag.

7.1.5. Cassiar Gold (Cassiar Gold Corp.)

Cassiar Gold Corp. completed 23,088 m of diamond drilling in 70 holes at their **Cassiar Gold** project. Results from the Taurus deposit included 72.25 m grading 1.09 g/t Au, 22.2 m grading 1.50 g/t Au, including 0.75 m grading 9.61 g/t Au, 10.5 m grading 4.47 g/t Au, 6.4 m grading 11.1 g/t Au, 3.25 m

Table 5. Selected exploration projects, Northwest Region.

Project	Operator (partner)	Commodity; Deposit type; MINFILE	Resources (NI 43-101 compliant unless indicated otherwise)	Comments
Atlin Goldfields	**Pacific Bay Minerals Ltd.**	Au; Precious metal veins; 104N 043	na	250 m of diamond drilling in 2 holes. Initial results included 9.96 g/t Au across 3.05 m in the Yellowjacket main zone.
Atsutla Gold	**Trailbreaker Resources Ltd.**	Au, Ag; Polymetallic veins; 104O 007	na	Exploration included geological mapping, prospecting, and soil and rock sampling. High-grade zones identified. Rock sample results include 53.3 g/t Au, 22.1 g/t Au and 11.7 g/t Au with 212 g/t Ag.
BA	**Mountain Boy Minerals Ltd.**	Ag, Cu, Pb, Zn; Subaqueous hot spring Ag-Au; 104A 180	na	Geological mapping, rock sampling, and SWIR sampling.
Ball Creek	**Orogen Royalties Inc.**	Cu, Mo, Ag; Porphyry Cu±Mo±Au; 104G 072	na	Relogging and sampling of historical drill core, geological mapping, prospecting, and rock sampling (44).
BAM (Jan Copper)	**P2 Gold Inc.**	Cu, Au; Epithermal Au-Ag-Cu	na	Results included 22.0 m grading 0.36% Cu including 2.0 m of 2.15% Cu.
BAM (Monarch Gold)	**P2 Gold Inc.**	Au; Epithermal Au-Ag-Cu	na	95 holes drilled (13,967 m). Results included 7.0 m grading 5.63 g/t Au, 80.0 m grading 1.38 g/t Au, including 12.2 m grading 2.43 g/t Au. Airborne ZTEM survey.
Berg	**Surge Copper Corp.**	Cu, Mo, Ag; Porphyry Cu±Mo±Au; 093E 046	M+I: 610 Mt 0.27% Cu, 0.03% Mo, 3.0 g/t Ag Inf: 28.1 Mt 0.22% Cu, 0.02% Mo, 3.8 g/t Ag	10 holes drilled totalling 4782 m. Prospecting, large IP survey, soil and rock sampling.
Big Onion	**Gama Explorations Inc.**	Cu, Mo, Ag; Porphyry Cu±Mo±Au	na	Geological mapping and soil and rock sampling.
Big Red	**Libero Copper & Gold Corp.**	Cu, Au; Alkalic porphyry; 104G 208	na	2551 m of drilling in 4 holes at the Terry porphyry target. Results included 8.5 m grading 0.84% Cu, 0.07 g/t Au, and 5.69 g/t Ag within 119.5 m grading 0.25% Cu, 0.02 g/t Au, and 2.26 g/t.
Bingo	**Juggernaut Exploration Ltd.**	Au, Cu, Pb, Zn; Polymetallic veins	na	Prospecting, mapping, rock and soil sampling.

Table 5. Continued.

Blue	**Core Assets Corporation**	Ag, Pb, Zn, Cu; Skarn carbonate-replacement; 104M 022	na	7371 m of drilling (21 holes). Prospecting and geological mapping. Results included 1.2 m grading 215 g/t Ag, 9.9% Zn, 8.9% Pb, and 0.36% Cu within 17.19 m grading 28 g/t Ag, 1.2% Zn, 1.4% Pb, and 0.10% Cu.
Buck	**Sun Summit Minerals Corp.**	Au, Ag, Zn, Pb, Cu; Polymetallic veins; 093L 009	na	7000 m of drilling (17 holes). Soil sampling, 34 line-km of IP and a property-wide airborne VTEM survey. Results included 1.0 m grading 26.5 g/t Au, 199 g/t Ag, within 13.2 m grading 2.75 g/t Au, 22.99 g/t Ag. 1.9 m grading 3.16 g/t Au, 82.92 g/t Ag, within 10.3 m grading 1.11 g/t Au, 25.89 g/t Ag.
Cannonball	**Goldrea Resources Corp.**	Cu, Au; Alkalic porphyry; 104B 346	na	Geological mapping, prospecting, and rock sampling.
Cassiar Gold	**Cassiar Gold Corp.**	Au; Precious metal veins; 104P 012, 19	Inf: 21.83 Mt 1.43 g/t Au (0.7 g/t Au cut off)	23,088 m of drilling (70 holes). Results from Taurus included 72.25 m grading 1.09 g/t Au, 22.2 m grading 1.50 g/t Au, including 0.75 m grading 9.61 g/t Au, 10.5 m grading 4.47 g/t Au, and 6.4 m grading 11.1 g/t Au, 3.25 m of 11.1 g/t Au with 0.5 m of 45.30 g/t Au.
Del Norte	**Decade Resources Corp.**	Au, Ag; Polymetallic veins; 103P 301	na	Drill results highlights include 3.6 m grading 5 g/t Au and 660 g/t Ag over and 2.29 m grading 72 g/t Au and 3074 g/t Ag.
DOC	**Hanstone Gold Corp.**	Au, Ag; Intrusion-related, mesothermal; 104B 014	na	Bulk sampling, surface sampling and mapping. Bulk sampling of 18 sample pits including 180 kg from Q17 vein and 130 kg from Q19 vein. Highlight grab sample results 277.9 g/t Au and 935 g/t Ag, 242.7 g/t Au and 1200 g/t Ag, as well as 111.5 g/t Au and 155 g/t Ag.
Duke	**Amarc Resources Ltd.**	Cu, Au; Porphyry Cu±Mo±Au	na	A late fall drilling program. Work is funded by Boliden Mineral Canada Ltd. who may earn up to 60% ownership spending $30 million in four years and an additional 10% spending an additional $60 million in six years

Table 5. Continued.

Dungate	**Edgemont Gold Corp.**	Cu, Au; Porphyry Cu±Mo±Au; 093L 010	na	2046 m of drilling in 5 holes. Results reported included 146 m grading 0.14 g/t Au; including 6 m grading 0.50 g/t Au, and 7 m grading 0.46 g/t Au.
E&L	**Garibaldi Resources Corp.**	Ni, Cu, Co, Pt, Pd, Au; Tholeiitic intrusion hosted; 104B 006	na	2200 m of drilling in 4 holes. Drilling intersected nickel-bearing disseminated and semi-massive sulphide mineralization, extending mineralization along strike 205 m.
Eaglehead	**Northern Fox Copper Inc.**	Cu, Mo, Au; Porphyry Cu±Mo±Au; 104I 008	na	Archeological survey. Sampling of mineralized intervals from historical drill holes to compare with historical metallurgical test work for the Bornite and East mineralized zones. Continued water quality sampling to establish baseline environmental database.
Emerson	**Harvest Gold Corporation**	Cu, Au, Mo; Porphyry Cu±Mo±Au; 093L 032	na	3018 m (7 holes) intersected a feldspar porphyry with quartz stockwork zones that are associated with anomalous Mo and contain quartz-sericite-pyrite-clay alteration.
Engineer	**Engineer Gold Mines Ltd.**	Au, Ag; Epithermal; 104M 014	Inf: 41,000 t 19.0 g/t Au	In permitting process to complete a 10,000 t bulk sample.
Eskay-Corey	**Eskay Mining Corp. 80%** and Kirkland Lake Gold Ltd. 20%	Au, Ag, Cu, Zn; Noranda/Kuroko massive sulphide; 104B 385	na	29,500 m drilling focussed on defining the extent of the TV-Jeff trend. Prospecting, geological mapping and rock sampling of the Scarlet Ridge-Tarn Lake trend. Drilling at three targets (Scarlet Ridge, Scarlet Valley and Tarn Lake. Reconnaissance work at six prospects. Reported drilling results include 30.56 m grading 1.14 g/t Au, 30.58 g/t Ag, including 2.0 m grading 3.36 g/t Au, 109.50 g/t Ag, 43.96 m grading 1.06 g/t Au, 2.24 g/t Ag including 1.59 m 15.44 g/t Au, 28.20 g/t Ag. Some drill results also returned base metal mineralization including Zn, Pb, and Cu.

Table 5. Continued.

Eskay Creek	**Skeena Resources Limited**	Au, Ag, Cu, Pb, Zn; VMS and precious metal veins; 104B 008	M+I: 46.5 Mt 2.6 g/t Au, 63.2 g/t Ag (pit constrained) P+Pr: 29.9 Mt 2.99 g/t Au, 79 g/t Ag	Feasibility study released that highlighted economics with an after-tax internal rate of return of 50.2%. Highlight drill results included 12.12 m grading 47.50 g/t Au, 73.4 g/t Ag and 96.02 m grading 1.13 g/t Au, 6.6 g/t Ag.
Foremore	**Sassy Gold Corp.**	Au, Ag, Pb, Cu; Polymetallic veins	na	3740 m DDH drilling (18 holes) at the Westmore Discovery zone.
Golddigger	**Goliath Resources Limited**	Au, Cu, Pb, Zn; Polymetallic veins; 103P 341	na	26,321 m DDH drilling (86 holes) at Surebet zone. Reported results included 1.0 m grading 115.0 g/t Au, and 28.5 g/t Ag, within 5.0 m grading 23.17 g/t Au, and 6.32 g/t Ag along with base metal mineralization.
Harry	**Teuton Resources Corp.**	Au, Ag; Epithermal; 104B 434	na	IP and magnetic surveys, prospecting, rock sampling, and backpack surface drilling.
Hat	**Doubleview Gold Corp.**	Cu, Au; Alkalic porphyry; 104J 021	na	2200 m of diamond drilling in 5 holes.
Iskut	**Seabridge Gold Inc.**	Cu, Au; Porphyry; 104B 694	na	10,600 m DDH drilling (10 holes). Drilling discovered breccia pipe mineralization beneath the historical Bronson slope skarn deposit. The breccia pipe is mineralized with gold associated with copper mineralization on its margins.
Kitsault Valley (Dolly Varden)	**Dolly Varden Silver Corporation**	Cu, Pb, Zn, Ag, Au; Kuroko VMS with polymetallic veins; 103P 188	I: 3.42 Mt 299.8 g/t Ag Inf: 1.29 Mt 277.0 g/t Ag	Diamond drilling. Highlight results included 1.6 m of 4326 g/t Ag, 4.2% Pb, 1.4% Zn, 1.0 g/t Au, 50.18 m grading 414 g/t Ag, 12.51 m of 442 g/t Ag, 0.26% Pb, and 0.31% Zn including 1.50 m grading 1367 g/t Ag, 0.22% Pb, and 0.17% Zn.

Table 5. Continued.

Kitsault Valley (Homestake Ridge)	**Dolly Varden Silver Corporation**	Au, Ag, Pb, Zn; Polymetallic veins, Marine volcanic association Cu, Pb, Zn, Au, Ag; 103P 188	Dolly Varden I: 3.417 Mt 299.8 g/t Ag Inf: 1.285 Mt 277.0 g/t Ag Homestake Ridge I: 0.736 Mt 7.02 g/t Au, 74.8 g/t Ag Inf: 5.545 Mt 4.58 g/t Au, 100 g/t Ag	Dolly Varden Silver Corporation acquired the Homestake Ridge project from Fury Gold Mines Ltd. and combined it with Dolly Varden Silver project. Drilling, (37,061 m, 108 holes). Results from Homestake Ridge included 3.08 m grading 18.76 g/t Au, 193 g/t Ag, 0.28% Cu. Highlights from Dolly Varden included 50.18 m grading 414 g/t Ag, 0.18% Pb, 0.19% Zn.
Kinskuch (Hecla)	**Hecla Mining Company**	Cu, Ag, Au; Porphyry; 103P 016	na	Geological mapping, prospecting, and rock sampling.
Kirkham	**Metallis Resources Inc.**	Cu, Au; Porphyry; 104B 209	na	DDH drilling (1961 m, 4 holes), intersected chalcopyrite-mineralized porphyry, massive pyrite, and pyrrhotite veins. Highlight results include 205.1 m grading 0.30 g/t Au, 0.084% Cu, including 106.9 m grading 0.34 g/t Au, 0.130% Cu, and 37.7 m grading 0.59 g/t Au, 0.165% Cu.
LGM	**Origen Resources Ltd.**	Au, Ag; Epithermal; 104G 447	na	1583 m of diamond drilling in 5 holes.
Midas	**Juggernaut Exploration Ltd.**	Au, Ag, Cu, Zn; Skarn; 103I 131	na	Rock sampling, prospecting, and geological mapping. A 1 m chip sample with 9.342 g/t Au, 117 g/t Au, 132 g/t Pb, 1.585% Cu, 1.77% Zn.
NAK	**American Eagle Gold Corp.**	Cu, Au; Porphyry Cu±Mo±Au; 093M 010	na	DDH drilling (5600 m, 7 holes). American Eagle Gold Corp. and Orefinders Resources Inc. entered into an option agreement where Orefinders can earn a 20% interest in American Eagle's NAK Copper-Gold Porphyry project. Results included 135 m of 0.96 g/t Au, 0.27% Cu, 1.41 g/t Ag, and 47 ppm Mo within 851 m of 0.22 g/t Au, 0.17% Cu, 0.97 g/t Ag, and 74 ppm Mo. 301 m of 0.5 g/t Au, 0.22% Cu, 1.13 g/t Ag, and 45 ppm Mo within 956 m of 0.19 g/t Au, 0.2% Cu, 1.3 g/t Ag, and 38 ppm Mo.

Table 5. Continued.

New Polaris	**Canagold Resources Ltd.**	Au; Au-quartz veins; 104K 003	I: 1.69 Mt 10.8 g/t Au Inf: 1.48 Mt 10.2 g/t Au	DDH drilling (8000 m, 25 holes). Results included 25.1 m grading 13.6 g/t Au, 4.3 m grading 22.1 g/t Au, 3.0 m grading 22.9 g/t Au, and 4.7 m grading 7.48 g/t Au.
Newmont Lake	**Enduro Metals Corporation**	Au, Cu, Ag; Intrusion-related Au pyrrhotite veins; 104B 126	na	DDH drilling (10,897 m in 25 holes). Initial results from Burgundy Ridge target included 66.8 m grading 0.16 g/t Au, 0.35% Cu, 0.05% Zn, 5.57 g/t Ag, including 6.08 m grading 0.33 g/t Au 1.41% Cu, 0.18% Zn, 19.61 g/t Ag.
Ootsa	**Surge Copper Corp.**	Cu, Au, Ag, Mo; Calc-alkaline porphyry; 093E 105	M+I: 438.6 Mt 0.18% Cu, 0.12 g/t Au, 0.017% Mo, 2.1 g/t Ag Inf: 137.7 Mt 0.15% Cu, 0.1 g/t Au, 0.015% Mo, 2.0 g/t Ag (2022 Resource Estimate update)	An updated mineral resource estimate had a 96% increase in Measured and Indicated resource and additional Inferred resources. DDH drilling (10,518 m, 28 holes) at the Seel Breccia zone and targets surrounding the Seel and Ox deposits. Highlights included 64.6 m grading 0.24% Cu, 0.17 g/t Au, 22.7 g/t Ag, 0.67% Zn and 0.29% Pb, including 18.6 m grading 0.75% Cu, 0.49 g/t Au, 61.2 g/t Ag, 1.17% Zn and 0.58% Pb. Drilling from the Blackjack target intersected 46 m grading 99.4 g/t Ag, including 2.0 m grading 1430.0 g/t Ag, and 2.0 m of 346 g/t Ag. Prospecting, soil and rock sampling.
Oweegee	**Sanatana Resources Inc.**	Cu, Au; Subvolcanic Cu-Ag-Au (As-Sb); 104A 165	na	DDH drilling (3679 m, 12 holes). Copper mineralization observed in 8 holes.
Poplar	**Universal Copper Ltd.**	Cu, Au, Ag, Mo; Porphyry Cu±Mo±Au	I: 152.3 Mt 0.32% Cu, 0.09 g/t Au, 2.58 g/t Ag, 0.009% Mo Inf: 139.3 Mt 0.29% Cu, 0.07 g/t Au, 4.95 g/t Ag, 0.005% Mo	DDH drilling (1983 m, 5 holes). Results included 214.4 m grading 0.401% Cu, 0.001% Mo, 0.15 g/t Au and 1.27 g/t Ag, 162.8 m grading 0.412% Cu, 0.020% Mo, 0.104 g/t Au, 1.14 g/t Ag and 216 m grading 0.353% Cu, 0.14 g/t Au, and 5.91 g/t Ag including 87 m grading 0.531% Cu, 0.36 g/t Au and 20.67 g/t Ag.
Porcher Island	**Imperial Metals Corporation**	Au; Au-quartz veins; 103J 017	na	Soil geochemistry and lidar survey.

Table 5. Continued.

Porter	**Strikepoint Gold Inc.**	Au, Ag, Zn, Pb; Polymetallic veins; 103P 089	na	DDH (520 m, 4 holes), prospecting, rock, and channel sampling. Drilling results included 10.97 m grading 245.6 g/t Ag, 0.08 g/t Au including 2.9 m grading 643.2 g/t Ag, 0.17 g/t Au and 0.51 m grading 2980 g/t Ag and 0.74 g/t Au. Channel sampling results included 2980 g/t Ag and 0.74 g/t Au across 0.51 m, 116 g/t Ag and 3.14 g/t Au across 1.0 m, and 108.55 g/t Ag and 1.13 g/t Au across 2.09 m.
Ranch	**Thesis Gold Inc.**	Au, Ag; Epithermal; 094E 267	na	DDH (36,491 m, >125 holes). Soil (4088) and rock (480) sampling; geological mapping. Drilling results included 39.0 m grading 2.56 g/t Au, 11.99 g/t Ag including 32 m grading 2.97 g/t Au, 13.75 g/t Ag. 25.0 m grading 3.22 g/t Au, 28.78 g/t Ag. 91.00 m grading 1.81 g/t Au, 8.41 g/t Ag, including 35 m grading 2.93 g/t Au, 10.36 g/t Ag.
Rock and Roll	**Etruscus Resources Corp.**	Cu, Zn, Pb, Au; Besshi VMS and intrusion related precious metal veins; 104B 377	Inf: 2.02 Mt 0.71 g/t Au, 87.1 g/t Ag, 0.23% Cu, 0.23% Pb, 0.98% Zn	14.25 line-km IP survey. Geological mapping and sampling (128 soil, 70 rock). Results extended quartz-sericite-pyrite porphyry style alteration 700 m east at the discovery zone. Soil sampling extended the anomalous copper-gold-molybdenum Heather zone by 350 m.
Ruby Creek	**Stuhini Exploration Ltd.**	Mo; Porphyry Cu±Mo±Au; 104N 080	M+I: 369.4 Mt 0.053% Mo Inf: 41.9 Mt 0.047% Mo (2022)	Diamond drilling of 2400 m in 8 holes, mapping, and prospecting. Rock sampling. Highlight samples with 16,030 g/t Ag, 3.6% Pb and 13,250 g/t Ag and 5.02 g/t Au. Release of a Mineral Resource estimate.
Schaft Creek	**Teck Resources Ltd. 75%**, Copper Fox Minerals Inc. 25%	Cu, Mo, Au, Ag; Porphyry Cu±Mo±Au; 104G 015	M+I: 1.346 Bt 0.26% Cu, 0.16 g/t Au, 0.017% Mo, 1.25 g/t Ag Inf: 343.6 Mt 0.17% Cu, 0.11 g/t Au, 0.013% Mo, 0.84 g/t Ag (2021)	Drilling of 4688 m in 11 holes. Environmental baseline data collection was completed.

Table 5. Continued.

Scottie Gold Mine	**Scottie Resources Corp.**	Au, Ag, Cu; Intrusion-related and polymetallic veins; 104B 034	na	DDH drilling (17,176 m) at the Blueberry zone. Results included 16.15 m grading 9.12 g/t Au, 44 g/t Ag. 8.6 m grading 11.3 g/t Au, and 12.5 m grading 13.3 g/t Au. Drilling increased the zone's known depth of mineralization to 360 m and a strike length of 1.2 km.
Silver Hope	**Finlay Minerals Ltd.**	Cu, Ag, Au, Zn, Pb, Mo; Subvolcanic Cu-Ag-Au (As-Sb); 093L 056	na	1671 m of drilling (7 holes) and soil sampling. Expansion of the Silver Hope property by 5785 hectares contiguous to and northwest of the claim block. Drill results released from 2021 fall program highlight 76.57 m grading 0.45% Cu, 14.6g/t Ag, and 0.14g/t Au.
Silver Queen	**Equity Metals Corporation**	Ag, Pb, Zn, Au; Transitional porphyry-epithermal; 093L 002	I: 3.445 Mt 3.5% Zn, 2.13 g/t Au, 189 g/t Ag, 0.24% Cu, 0.6% Pb Inf: 1.9 Mt 2.0% Zn, 0.82 g/t Au, 167 g/t Ag, 0.23% Cu, 0.5% Pb (resources at NSR cut-off of C$100/t)	DDH drilling (5891 m, 16 holes). Highlight results included 1.3 m grading 1998 g/t Ag, 9.3 g/t Au, 0.17% Cu, 2.2% Pb, and 6.8% Zn within a 7.5 m interval grading 539 g/t Ag, 1.8 g/t Au, 0.5% Pb, and 1.8% Zn. Other results included 0.6 m grading 1705 g/t Ag, 2.1 g/t Au, 4.3% Cu, 1.6% Pb, 4.1% Zn, within 1.2 m grading 802 g/t Ag, 1.0 g/t Au, 2.1% Cu, 0.8% Zn, 2.0% Zn. Released an updated Mineral Resource Estimate.
Silver Switchback	**Norseman Silver Inc.**	Cu, Ag; Cu±Ag quartz veins; 093M 195	na	800 m of diamond drilling in 4 holes.
Silvertip	**Coeur Mining Inc.**	Ag, Pb, Zn; Manto carbonate-replacement; 104O 038	M+I: 2.817 Mt 321.3 g/t Ag, 5.55% Pb, 10.46% Zn Inf: 2.35 Mt 235.45 g/t Ag, 4.27% Pb, 8.98% Zn	61,000 m of drilling in 330 holes. More manto mineralization was discovered at the Camp Creek west zone. Drilling intersected chimney/feeder structures beneath the Discovery zone manto. Highlight results included 12 m grading 459.6 g/t Ag, 15.1% Zn, and 8.7% Pb, and 6.2 m grading 778.3 g/t Ag, 13.6% Zn, and 14.7% Pb.

Table 5. Continued.

Snip Gold	**Hochschild Mining PLC**	Au, Ag; Intrusion-related Au pyrrhotite veins; 104B 250	I: 2.50 Mt 10.4 g/t Au Inf: 2.184 Mt 10.3 g/t Au	Announced an updated mineral resource estimate in March. Drilled 10,377 m in 69 holes. Work included metallurgical work, processing plant designs and resource model updates in coordination with the ongoing Pre-feasibility study. Highlight results include 4.6 m grading 35 g/t Au and 11 g/t Ag, 8.0 m grading 20.2 g/t Au and 10 g/t Ag.
Snowfield (East Mitchell)	**Seabridge Gold Inc.**	Cu, Au, Ag, Mo; Porphyry Cu±Mo±Au; 104B 179	M+I: 1.76 Bt 0.55 g/t Au, 1.8 g/t Ag, 0.15% Cu, 85 ppm Mo Inf: 281 Mt 0.37 g/t Au, 2.3 g/t Ag, 0.07% Cu, 61 ppm Mo (2022 Seabridge Technical Report)	Early-stage construction continues for the KSM project (East Mitchell), including new access roads, new year-round camps, a bridge over the Bell-Irving River, a fish habitat offset program.
Southmore	**Mountain Boy Minerals Ltd**	Ag, Pb, Zn; Subaqueous hot spring Ag-Au	na	Ground truthing geophysical anomalies, soil and rock sampling; geological mapping.
Tatogga (Saddle North)	**Newmont Corporation**	Cu, Au, Ag; Porphyry Cu-Au (alkalic); 104G 432	I: 298 Mt 0.28% Cu, 0.36 g/t Au, 0.8 g/t Ag Inf: 543 Mt 0.25% Cu, 0.31 g/t Au, 0.7 g/t Ag	Newmont worked with the Tahltan Heritage Resources Environmental Assessment Team on a Tahltan land use study and with Tahltan Environmental Management to begin environmental studies.
Telegraph	**Mountain Boy Minerals Ltd.**	Cu; Porphyry Cu-Au (alkalic)	na	19.6 km of IP, geological mapping, prospecting, and rock sampling. Rock sample results included 19.7% Cu. New gossanous zone named Strata Gossan returned samples with 7.7% Cu. New ground was staked based on alteration mapping.
Terrace	**Decade Resources Ltd.**	Au, Ag, Pb; Polymetallic veins; 103I 107	na	1000 m of drilling in 4 holes. Rock sampling and prospecting. Drilling reported narrow zones of quartz veins containing chalcopyrite. Molybdenum mineralization was noted in one hole.
Theia	**Mountain Boy Minerals Ltd.**	Ag, Au, Pb, Cu, Zn; Polymetallic veins	na	Prospecting, rock sampling and sampling for geochronology.

Table 5. Continued.

Thorn (Camp Creek)	**Brixton Metals Corporation**	Cu, Ag, Au; Porphyry Cu±Mo±Au; 104K 174	na	Diamond drilling. Results included 967.2 m grading 0.25% Cu, 0.09 g/t Au, 2.39 g/t Ag, and 186 ppm Mo, with a 365 m interval grading 0.45% Cu, 0.13 g/t Au, 3.81 g/t Ag, and 328 ppm Mo, with another 40 m interval grading 0.67% Cu, 0.20 g/t Au, 5.16 g/t Ag, and 424 ppm Mo.
Thorn (Trapper Gold)	**Brixton Metals Corporation**	Au; Epithermal; 104K 175	na	DDH drilling (3924 m). Soil and rock sampling. Results include one hole with 64 m grading 5.74 g/t Au, 9.11 g/t Ag with a 52.0 m interval grading 6.97 g/t Au 10.83 g/t Ag, and 28.95 m within grading 10.36 g/t Au, 16.21 g/t Ag with 7 m interval grading 19.0 g/t Au, 23.11 g/t Ag.
Treaty Creek	**Tudor Gold Corp. 60%**, Teuton Resources Corp. 20%, American Creek Resources Ltd. 20%	Cu, Au; Porphyry; 104A 004	M+I: 815.7 Mt 0.66 g/t Au, 3.6 g/t Ag, 0.06% Cu Inf: 311.7 Mt 0.72 g/t Au, 4.0 g/t Ag, 0.05% Cu (2021 Tudor Gold Technical Report)	DDH (43,318 m, 55 holes). Results included 1497.5 m grading 0.76 g/t Au, 3.70 g/t Ag, and 0.27% Cu, 180 m grading 1.97 g/t Au, 3.72 g/t Ag, and 0.01% Cu including 57 m grading 4.30 g/t Au, 5.91 g/t Ag and 15 m of 7.76 g/t Au, 6.48 g/t Ag.
Trek	**Romios Gold Resources Inc.**	Cu, Au; Porphyry Cu-Au (alkalic); 104G 022	na	Mapping, prospecting, and rock sampling. A new discovery of skarn mineralization with copper and tungsten across an area 275 by 80 m. Several chip and grab samples collected returned tungsten assays from 0.04 to 0.68% WO_3, average 0.24% WO_3, and copper values from 0.05 to 0.98% Cu, average 0.27% Cu.
Turnagain	**Giga Metals Corporation**	Ni, Co, Pt, Cu, Mo; Alaskan-type, magmatic; 104I 014	M+I: 1.519 Bt 0.21% Ni, 0.013% Co Inf: 1.222 Bt 0.206% Ni, 0.012% Co	415 m of geotechnical drilling. Geotechnical data collection; engineering and metallurgical studies. Released an updated, increased mineral resource assessment. Giga Metals completed a joint venture transaction with Mitsubishi Corporation to earn 15% equity interest in Turnagain project and form a new company, Hard Creek Nickel Corp.

Table 5. Continued.

Whiting Creek	**Huckleberry Mines Ltd.**	Cu, Mo, Au; Porphyry Cu±Mo±Au; 093E 050	na	Property-wide mapping and sampling program, airborne ZTEM geophysical survey and a lidar survey.
Williams	**CopAur Minerals Inc.**	Au; Epithermal; 094E 028	na	DDH (1428 m, 4 holes). Results included 50 m grading 2.2 g/t Au, 0.13% Cu and 10.5 m grading 4.16 g/t Au, 0.09% Cu.
Willoughby	**Strikepoint Gold Inc.**	Au, Ag, Zn, Pb; Precious and polymetallic veins; 103P 006	na	1500 m of diamond drilling. Grab sampling, mapping. Drill results included 9.02 m grading 1.11 g/t Au, 20.96 g/t Ag. 4.20 m grading 2.48 g/t Au, 4.00 g/t Ag including 11.45 g/t Au and 13.70 g/t Ag over 0.85 m.
Zinc Bay	**Gardsmen Resources Inc.**	Cu, Au, Ag, Zn; Precious and polymetallic veins; 093E 034	na	IP survey, soil sampling, prospecting, and geological mapping.

M = Measured; I = Indicated; Inf = Inferred

grading 11.1 g/t Au including 0.5 m of 45.30 g/t Au. Results also included several shorter (<0.5 m) intervals of high-grade gold mineralization.

7.1.6. DOC (Hanstone Gold Corp.)

The **DOC** project is underlain by deformed and metamorphosed Upper Triassic volcanic rocks of the Stuhini Group that are locally cut by coeval intrusions of the Bronson stock. The most significant gold and silver grades are in sulphide-bearing quartz veins. Exploration in 2022 included geological mapping, prospecting, rock sampling, and bulk sampling of 18 sample pits including 180 kg from the Q17 vein and 130 kg from the Q19 vein. Highlight grab sample results reported include 277.9 g/t Au, and 935 g/t Ag, 242.7 g/t Au, and 1200 g/t Ag, as well as 111.5 g/t Au and 155 g/t Ag.

7.1.7. Engineer Gold Mine (Engineer Gold Mines Ltd.)

Engineer Gold Mines Ltd.'s **Engineer Gold** Mine project is centered on the historic Engineer Gold mine 32 km southwest of Atlin. Engineer is currently in the application process to complete a 10,000 t bulk sample.

7.1.8. Eskay-Corey (Eskay Mining Corp.)

At their **Eskay-Corey** property, Eskay Mining completed a 29,500 m drill program that started in late summer. Drilling focussed on defining the extent of the corridor between the TV and Jeff showings. Eskay Mining also conducted prospecting, geological mapping and rock sampling of the Scarlet Ridge-Tarn Lake trend, and conducted drilling at three previously undrilled targets, Scarlet Ridge, Scarlet Valley, and Tarn Lake. Prospecting and reconnaissance level work was conducted at six mineral prospects for future potential drill targets. Drill results south of the TV showing reported 30.56 m grading 1.14 g/t Au, 30.58 g/t Ag including 2.0 m grading 3.36 g/t Au, and 109.50 g/t Ag. North of the Jeff showing drill results returned 43.96 m grading 1.06 g/t Au, 2.24 g/t Ag including 1.59 m of 15.44 g/t Au, and 28.20 g/t Ag. Some drill results from the area also returned base metal mineralization including Zn, Pb, and Cu.

7.1.9. Eskay Creek (Skeena Resources Ltd.)

Eskay Creek has been the focus of considerable exploration since 1932. In 1988, the news of drilling intersecting stratiform stibnite-realgar rich mineralization (Roth, 1989) in 21A zone sparked a staking rush throughout the region. An underground mine operated from 1994 to 2008 and produced 3.3 Moz of Au and 160 Moz of Ag (average grades of 45 g/t Au and 2224 g/t Ag).

A feasibility study was released that highlighted robust economics with an after-tax internal rate of return (IRR) of 50.2% and a 1-year payback period on pre-production capital expenditures. The study reported Proven and Probable open-pit Mineral Reserves of 29.9 Mt containing 2.87 Moz Au and 75.5 Moz Ag with an after-tax net present value of C$1.41 billion at a base case of $1700USD gold and $19USD silver. Life of mine production of 2.4 million oz Au and 66.7 million oz Ag at a minimum of 9 years. Highlight drill results included 12.12 m grading 47.50 g/t Au, 73.4 g/t Ag. 96.02 m grading 1.13 g/t Au, 6.6 g/t Ag.

7.1.10. Foremore (Sassy Gold Corp.)

Sassy Gold Corp. carried out 3740 m of diamond drilling in 18 holes at the Westmore Discovery zone of their **Foremore** property. Drilling was mainly designed to target strike and depth extension of the high-grade mineralization at the 4-amigo vein structures.

7.1.11. Harry (Teuton Resources Corp.)

The **Harry** gold-silver project is hosted by sericite altered Lower Jurassic felsic volcanic breccia and andesite tuff, with interbedded siltstone, argillite, and conglomerate of the Unuk River Formation (Hazelton Group). The property lies between the historic Scottie Gold and Premier mines. Arsenopyrite, galena, and sphalerite are in quartz floods and may be epithermal. Exploration at Harry consisted of IP and magnetic surveys, prospecting, rock sampling and backpack surface drilling.

7.1.12. LGM (Origen Resources Ltd.)

Origen's **LGM** property totals 26,771 ha and has multiple target areas. In 2022, 1583 m of diamond drilling was completed in five holes. The focus of drilling was on coincident geochemical, geophysical and alteration anomalies including the Hidden Gold zone.

7.1.13. New Polaris (Canagold Resources Ltd.)

Canagold Resources Ltd. completed 8000 m of diamond drilling in 25 holes at their **New Polaris** gold project. Drilling was designed to upgrade Inferred resources to Indicated and target gold mineralization down plunge. Results included 25.1 m grading 13.6 g/t Au, 4.3 m grading 22.1 g/t Au, 3.0 m grading 22.9 g/t Au, and 4.7 m grading 7.48 g/t Au. The company announced commencement of a Feasibility Study in October that is expected to take approximately 18 months to complete.

7.1.14. Porcher Island (Imperial Metals Corporation.)

Imperial Metals carried out soil sampling and a lidar survey at their **Porcher Island** project.

7.1.15. Porter (Strikepoint Gold Inc.)

Strikepoint Gold's **Porter** project hosts two past-producing silver-rich vein systems about 2 km apart: Silverado and Prosperity/Porter Idaho. Strikepoint carried out 520 m of diamond drilling in four holes, prospecting, rock, and channel sampling. Drilling focussed on testing extensions to high-grade silver mineralization outlined in historic resource estimates and exploration for intrusive-related Au-Ag mineralization. Drilling results included 10.97 m grading 245.6 g/t Ag, and 0.08 g/t Au including 2.9 m grading 643.2 g/t Ag, and 0.17 g/t Au and 0.51 m grading 2980 g/t Ag and 0.74 g/t Au. Channel sampling results included 2980 g/t Ag and 0.74 g/t Au across 0.51 m, 116 g/t Ag and 3.14 g/t Au across 1.0 m, and 108.55 g/t Ag and 1.13 g/t Au across 2.09 m.

7.1.16. Ranch (Thesis Gold Inc.)

Thesis completed 36,491m of diamond drilling in more than 125 holes at their **Ranch** epithermal Au-Ag project. Other exploration included 4088 soil samples, 480 rocks samples, and geological mapping, focussed on new exploration targets: Alberts Hump, Steve, and Patti. Drilling results included 39.0 m grading 2.56 g/t Au and 11.99 g/t Ag, including 32 m grading 2.97 g/t Au and 13.75 g/t Ag, 25.0 m grading 3.22 g/t Au and 28.78 g/t Ag, and 91.00 m grading 1.81 g/t Au and 8.41 g/t Ag, including 35 m grading 2.93 g/t Au and 10.36 g/t Ag.

7.1.17. Ruby Creek (Stuhini Exploration Ltd.)

Stuhini Exploration Ltd. Carried out 2400 m of diamond drilling in eight holes, mapping, prospecting, and rock sampling at their **Ruby Creek** project. A new Mineral Resource estimate was released (March 2022) with a combined Measured and Indicated resource of 369.4 Mt grading 0.053% Mo and an Inferred resource of 41.9 Mt grading 0.047% Mo. Highlight rock samples returned assays of 16,030 g/t Ag, 3.6% Pb, and 13,250 g/t Ag, and 5.02 g/t Au.

7.1.18. Scottie Gold Mine (Scottie Resources Corp.)

The **Scottie Gold** Mine project, 35 km north of Stewart, is centred on the past-producing Scottie Gold mine, which operated from 1981 to 1985, producing 95,426 oz of Au at 16.2 g/t Au. The property is cross-cut by north-striking and locally abundant east-striking faults. Stanley and Nelson (2022) recognized Stuhini Group and a Hazelton Group stratigraphy in the area that is comparable to that in the McTagg anticlinorium. Gold occurs in steeply dipping pyrrhotite-pyrite-quartz-calcite veins. Scottie Resources carried out 17,176 m of diamond drilling and geophysical surveys at the Blueberry zone. Results included 16.15 m grading 9.12 g/t Au, 44 g/t Ag, 8.6 m grading 11.3 g/t Au, and 12.5 m grading 13.3 g/t Au. Drill results have increased the Blueberry zone's known depth of mineralization to a total of 360 m and strike length of 1.2 km.

7.1.19. Silver Hope (Finlay Minerals Ltd.)

The **Silver Hope** project's mineral tenure surrounds the past-producing Equity Silver mine, which operated from 1980 to 1994, processing 33.8 Mt grading 0.4% Cu, 64.9 g/t Ag, and 0.46 g/t Au. Finlay completed 1671 m of drilling in seven holes, soil sampling, prospecting, and expanded the Silver Hope property by adding 5785 hectares of claims contiguous to and northwest of their previous mineral tenure. Results released from 2021 fall drilling included 76.57 m grading 0.45% Cu, 14.6 g/t Ag, and 0.14 g/t Au.

7.1.20. Snip Gold (Hochschild Mining PLC)

The **Snip** deposit is a past-producing underground mine with renewed interest. The mine produced at an average grade of 27.5 g/t Au between 1991 and 1999. The deposit is a southwest-dipping vein system in Upper Triassic metasedimentary rocks of the Stuhini Group that are cut by Early Jurassic stocks and plutons. In March, Hochschild released an updated Mineral

Resource Estimate with an Indicated resource of 2.50 Mt grading 10.4 g/t Au and an Inferred resource of 2.184 Mt grading 10.3 g/t Au. Hochschild Mining is exercising its right to take over as operator for Snip, earning a 60% interest from Skeena Resources Ltd by spending approximately $100 million during the option period with a yearly minimum of $7.5 million in exploration or development expenditures on Snip. High-grade intersections from drilling included 4.6 m grading 35 g/t Au, 11 g/t Ag, and 8.0 m grading 20.2 g/t Au, 10 g/t Ag.

7.1.21. Thorn (Trapper Gold) (Brixton Metals Corporation)

Brixton completed 18,090 m of diamond drilling at their **Thorn** project between both the Camp Creek and **Trapper Gold** targets. Soil and rock sampling programs were also carried out. Results at the Trapper Gold epithermal target include one drill hole with 64 m grading 5.74 g/t Au, 9.11 g/t Ag, including a 28.95 m interval grading 10.36 g/t Au, 16.21 g/t Ag and a 7 m interval grading 19.0 g/t Au, 23.11 g/t Ag. Another hole assayed 262 m grading 1.04 g/t Au including 75.49 m grading 2.35 g/t Au including 6.93 m grading 7.16 g/t Au.

7.1.22. Treaty Creek (Tudor Gold Corp. 60%, Teuton Resources Corp. 20%, American Creek Resources Ltd. 20%)

Tudor Gold Corp.'s **Treaty Creek** project is defined by its bulk tonnage resource in Jurassic volcanic and intrusive rocks that also host the KSM deposits 5 km to the southwest. The project has 815.7 Mt of Measured and Indicated resource (March 2021) grading 0.66 g/t Au, 3.6 g/t Ag, and 0.06% Cu, and 311.7 Mt of Inferred grading 0.72 g/t Au, 4.0 g/t Ag, and 0.05% Cu. For 2022, 43,318 m of diamond drilling in 55 holes was completed. Results included 1497.5 m grading 0.76 g/t Au, 3.70 g/t Ag, and 0.27% Cu, 180 m grading 1.97 g/t Au, 3.72 g/t Ag, and 0.01% Cu with intervals of 57 m grading 4.30 g/t Au and 5.91 g/t Ag and 15 m of 7.76 g/t Au, and 6.48 g/t Ag. Figure 6 shows an example of high-grade core.

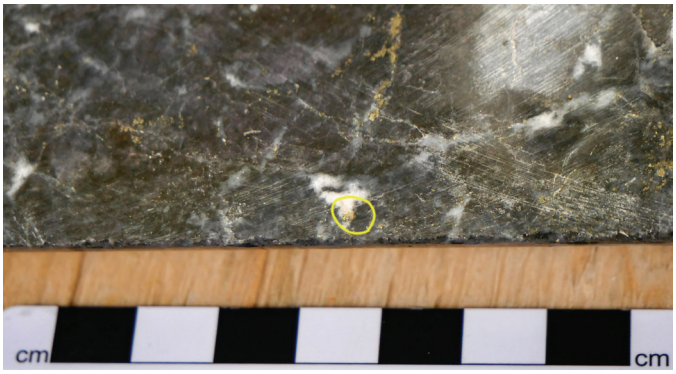

Fig. 6. Visible gold (circled) and chalcopyrite in quartz veinlets, Treaty Creek project.

7.1.23. Williams (CopAur Minerals Inc.)

Exploration at CopAur's **Williams** copper-gold project previously identified the T-Bill Gold zone and the GIC copper gold zone. In 2022, 1428 m of diamond drilling was completed in four holes. Drilling targeted untested soil geochemical and IP chargeability anomalies and discovered a new gold discovery to the west of the GIC porphyry target. Drilling results from this new discovery included 50 m grading 2.2 g/t Au, 0.13% Cu and 10.5 m grading 4.16 g/t Au, 0.09% Cu.

7.1.24. Willoughby (Strikepoint Gold Inc.)

The **Willoughby** project is 25 km northeast of Stewart. Between 1989 and 1996, more than 12,000 m of drilling was completed, and 110 m of underground workings excavated. Strikepoint completed 1500 m of diamond drilling. Grab sampling, and geological mapping. Drill results included 9.02 m grading 1.11 g/t Au and 20.96 g/t Ag and 4.20 m grading 2.48 g/t Au and 4.00 g/t Ag including a 0.85 m interval grading 11.45 g/t Au and 13.70 g/t Ag.

7.2. Selected porphyry projects

The Northwest Region hosts many porphyry deposits (Fig. 1; Table 5) and is highly prospective for Au-Cu-Mo bulk-tonnage mineralization related to Triassic-Jurassic island arc assembly and post-accretionary intrusive complexes.

7.2.1. Ball Creek (Orogen Royalties Inc.)

The **Ball Creek** property contains seven porphyry gold-copper targets and four epithermal gold-silver targets. The Ball Creek Main zone is a 1200 by 400 m porphyry system that has returned drill intersections including 455 m grading 0.28 g/t Au and 0.11% Cu, and 231 m grading 0.54g/t Au and 0.21% Cu. Exploration for 2022 consisted of relogging and sampling historical drill core from the Main, Mess, and More zones, geological mapping, prospecting, and rock sampling.

7.2.2. Berg (Surge Copper Corp.)

Surge has an option to earn a 70% interest in the **Berg** project from Centerra Gold Inc. The Berg deposit has a resource estimate (August 2022) with a Measured and Indicated resource of 610 Mt grading 0.27% Cu, 0.03% Mo, and 3.0 g/t Ag, and an Inferred resource of 28.1 Mt grading 0.22% Cu, 0.02% Mo, and 3.8 g/t Ag. Fall exploration included ten holes totalling 4782 m of diamond drilling, prospecting, a large IP survey, and soil and rock sampling. Figure 7 illustrates a high-grade intersection

Fig. 7. Drill core showing chalcopyrite, pyrite, and molybdenum in veinlets within a porphyry unit, Bergette target. Photo courtesy of Surge Copper.

at Berg. Surge announced in late fall commencement of a Preliminary Economic Assessment on the Berg deposit.

7.2.3. Big Onion (Gama Explorations Inc.)

The **Big Onion** project is a porphyry Cu-Mo target area 16 km east of Smithers. Exploration included soil and rock sampling, and geological mapping.

7.2.4. Big Red (Libero Copper & Gold Corporation)

At the **Big Red** project, porphyry Cu-Au-Mo, epithermal Au-Ag, and VMS-style mineralization have been recognized. Libero carried out a 2551 m, four-hole drill program. The drilling tested for a hydrothermal source immediately southeast of the Terry porphyry mineralization. Early winter reported results included 8.5 m grading 0.84% Cu, 0.07 g/t Au, and 5.69 g/t Ag within 119.5 m grading 0.25% Cu, 0.02 g/t Au, and 2.26 g/t.

7.2.5. Cannonball (Goldrea Resources Corp.)

Goldrea carried out geological mapping, prospecting, rock sampling and expanded the mineral tenure at the **Cannonball** project for 2022. The company acquired an additional 70.9 hectares of tenure on the west side of the property.

7.2.6. Duke (Amarc Resources Ltd.)

Amarc Resources Ltd.'s **Duke** project straddles the Northwest and North Central regions. Amarc began late fall drilling at the Duke deposit. Work is funded by Boliden Mineral Canada Ltd. who may earn up to 60% ownership of the project by spending $30 million in four years and an additional 10% by spending a further $60 million in six years.

7.2.7. Dungate (Edgemont Gold Corp.)

Edgemont Gold carried out 2046 m of drilling in five holes at the **Dungate** project. Edgemont reported 146 m grading 0.14 g/t Au, including intervals of 6 m grading 0.50 g/t Au and 7 m grading 0.46 g/t Au.

7.2.8. Eaglehead (Northern Fox Copper Inc.)

Northern Fox's **Eaglehead** project includes a calc-alkalic copper porphyry deposit in Jurassic rocks of Quesnel terrane. Northern Fox carried out archeological surveying and sampled mineralized intervals from historical drill holes to complement historical metallurgical test work at the Bornite and East mineralized zones. The company also continued with water quality sampling to establish environmental baseline values.

7.2.9. Emerson (Harvest Gold Corporation)

In the spring of 2022, Harvest Gold Corporation completed 3018 m of diamond drilling in seven holes at their **Emerson** project. The feldspar porphyry drilled was reported to host quartz stockwork zones with anomalous Mo and quartz-sericite-pyrite-clay alteration.

7.2.10. Hat (Doubleview Gold Corp.)

Doubleview reported their **Hat** project as a gold-rich copper porphyry with additional critical metals including cobalt, silver, palladium, and scandium. This year, 2200 m were drilled in five holes. Drilling results included 907.8 m grading 0.31 g/t Ag, 0.12 g/t Au, 4.74 g/t Co, 0.15% Cu, 0.03 g/t Pd, and 28.64 g/t Sc.

7.2.11. Iskut (Seabridge Gold Inc.)

The **Iskut** project includes the former Johnny Mountain mine and the Bronson Slope copper-gold deposit. This year Seabridge carried out 10,600 m of diamond drilling in ten holes. Drilling discovered breccia pipe mineralization beneath the historical Bronson Slope skarn deposit. The breccia pipe is mineralized with gold associated with copper on its margins.

7.2.12. Kinskuch (Hecla) (Hecla Mining Company)

At their **Kinskuch** project, Hecla did geological mapping, prospecting, and rock sampling.

7.2.13. Kirkham (Metallis Resources Inc.)

The **Kirkham** property is on the western margin and adjacent to the Eskay rift. Metallis acquired the project in 2013 and has since conducted regional mapping and sampling, geophysics (IP, EM, magnetics, radiometric, VTEM), and more than 15,000 m of drilling. Metallis completed 1961 m of diamond drilling in four holes reported to have intersected chalcopyrite-mineralized porphyry, massive pyrite, and pyrrhotite veining. Highlight results include 205.1 m grading 0.30 g/t Au, and 0.084% Cu, including intervals of 106.9 m grading 0.34 g/t Au, and 0.130% Cu and 37.7 m grading 0.59 g/t Au, and 0.165% Cu.

7.2.14. NAK (American Eagle Gold Corp.)

Previous exploration at the **NAK** project included more than 18,000 m of diamond drilling in 105 holes. American Eagle Gold Corp. carried out diamond drilling and entered into an option agreement with Orefinders Resources Inc. where Orefinders can earn a 20% interest in the NAK project. Results included an interval of 135 m grading 0.96 g/t Au, 0.27% Cu, and 1.41 g/t Ag, and 47 ppm Mo within 851 m grading 0.22 g/t Au, 0.17% Cu, 0.97 g/t Ag, and 74 ppm Mo, 301 m grading 0.5 g/t Au, 0.22% Cu, 1.13 g/t Ag, and 45 ppm Mo within an interval of 956 m grading 0.19 g/t Au, 0.20% Cu, 1.3 g/t Ag, and 38 ppm Mo.

7.2.15. Newmont Lake (Enduro Metals Corporation)

Enduro Metals Corporation discovered new porphyry copper-gold mineralization at their **Newmont Lake** project. A total of 10,897 m of diamond drilling was completed in 25 holes. Drilling was mainly focussed on expanding the footprint of the Burgundy Ridge copper-gold porphyry target with some drilling at the McLymont West target along the McLymont fault. Initial results from the Burgundy ridge target include 66.8 m

grading 0.16 g/t Au, 0.35% Cu, 0.05% Zn, and 5.57 g/t Ag, including 6.08 m grading 0.33 g/t Au 1.41% Cu, 0.18% Zn, and 19.61 g/t Ag.

7.2.16. Ootsa (Surge Copper Corp.)

The **Ootsa** project contains three separate deposits: Ox, East Seel, and West Seel. The project is at the edge of a southeast-trending belt of porphyry Cu-Au deposits and prospects which include (from northwest-southeast) the Lucky Ship, Berg, Whiting Creek, Huckleberry, Ox, and Seel deposits. Like other deposits in the region, mineralization at Ootsa is temporally associated with the Bulkley suite intrusive rocks (Cretaceous) with calc-alkaline porphyry style mineralization. In 2022, an updated mineral resource estimate reported a 96% increase in the Measured and Indicated resource and additional Inferred resources. A total of 10,518 m of diamond drilling was carried out in 28 holes at the Seel breccia zone (Fig. 8) and targets surrounding the Seel and Ox deposits. Highlights included 64.6 m grading 0.24% Cu, 0.17 g/t Au, 22.7 g/t Ag, 0.67% Zn and 0.29% Pb with an 18.6 m interval of grading 0.75% Cu, 0.49 g/t Au, 61.2 g/t Ag, 1.17% Zn and 0.58% Pb. Drilling from the Blackjack target, approximately 4 km east of the Seel deposit, intersected 46 m of 99.4 g/t Ag, including intervals of 2.0 m with 1430.0 g/t Ag and 2.0 m with 346 g/t Ag. The field program also included prospecting, and soil and rock sampling.

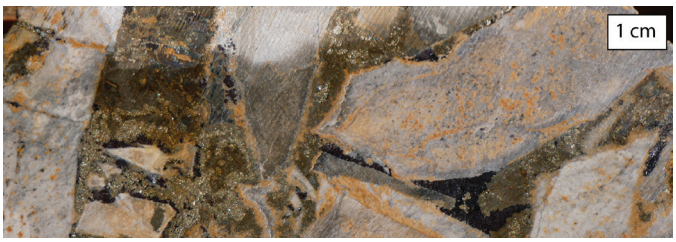

Fig. 8. Core from the Seel breccia zone with sphalerite, pyrite, and chalcopyrite, Oosta project.

7.2.17. Oweegee (Sanatana Resources Inc.)

Sanatana's **Oweegee** project is transected by Highway 37 and the NW transmission line. This year, Sanatana carried out 3679 m of diamond drilling in 12 holes; copper was observed in eight. Reported assays included 112.18 m grading 0.17% Cu, 0.22 g/t Au, 1.10 g/t Ag, including 12 m grading 0.40% Cu, 0.35 g/t Au, 2.10 g/t Ag and 12.47 m grading 0.40% Cu, 0.39 g/t Au, 1.34 g/t Ag.

7.2.18. Poplar (Universal Copper Ltd.)

In the spring, Universal Copper Ltd. completed 1983 m of diamond drilling in five holes at their **Poplar** project. The drilling was designed to expand known copper mineralization to depth and expand the limits of higher grade mineralization within the current mineral resource. Reported results included 214.4 m grading 0.401% Cu, 0.001% Mo, 0.15 g/t Au and 1.27 g/t Ag, 162.8 m grading 0.412% Cu, 0.020% Mo, 0.104 g/t Au, and 1.14 g/t Ag, and 216 m grading 0.353% Cu, 0.14 g/t Au, and 5.91 g/t Ag including 87 m grading 0.531% Cu, 0.36 g/t Au and 20.67 g/t Ag.

7.2.19. Schaft Creek (Teck Resources Limited 75%, Copper Fox Metals Inc. 25%)

The **Schaft Creek** porphyry deposit is an advanced-stage joint venture with a Measured and Indicated resource (September 2021) of 1.346 Bt grading 0.26% Cu, 0.16 g/t Au, 0.017% Mo, and 1.25 g/t Ag. Inferred resources are 343.6 Mt grading 0.17% Cu, 0.11 g/t Au, 0.013% Mo, and 0.84 g/t Ag. In 2022, 4688 m of drilling was completed in 11 holes to complement previous metallurgical testing. Holes were drilled in the three main mineralized zones (Liard, Paramount, and West Breccia). Environmental baseline data collection was completed.

7.2.20. Tatogga (Newmont Corporation)

Newmont Corporation's **Tatogga** project includes the Saddle North deposit. The deposit has an Indicated resource (August 2020) of 298 Mt grading 0.28% Cu, 0.36 g/t Au, and 0.8 g/t Ag and an Inferred Resource of 543 Mt grading 0.25% Cu, 0.31 g/t Au, and 0.7 g/t Ag. Newmont worked with the Tahltan Heritage Resources Environmental Assessment Team on a Tahltan land use study and Tahltan Environmental Management is to begin environmental studies.

7.2.21. Telegraph (Mountain Boy Minerals Ltd.)

Mountain Boy's **Telegraph** project consists of multiple properties. Mountain Boy has a 60% option on the DOK property, 100% interest in the DOKX-Yeti property, and 100% interest in ground that they staked. Mountain Boy carried out 19.6 line-km of IP, geological mapping, prospecting, and rock sampling. Rock sample results included 19.7% Cu. A new gossanous zone referred to as Strata gossan was discovered and returned samples with up to 7.7% Cu. New ground next to current mineral tenure was staked based on alteration mapping.

7.2.22. Thorn (Camp Creek) (Brixton Metals Corporation)

Brixton continued to drill porphyry copper mineralization at the **Camp Creek** target of their **Thorn** project. Reported results included 967.2 m grading 0.25% Cu, 0.09 g/t Au, 2.39 g/t Ag, and 186 ppm Mo, with a 365 m interval grading 0.45% Cu, 0.13 g/t Au, 3.81 g/t Ag, and 328 ppm Mo, and with another 40 m interval grading 0.67% Cu, 0.20 g/t Au, 5.16 g/t Ag, and 424 ppm Mo.

7.2.23. Trek (Romios Gold Resources Inc.)

Romios's **Trek** project consists of ten contiguous claims approximately 10 km from the Galore Creek deposit. Romios carried out IP and magnetotelluric geophysical surveys, geological mapping, prospecting, and rock sampling at the Trek South area. Exploration work reported a new discovery of copper and tungsten skarn mineralization across an area 275 by 80 m. Several chip and grab samples returned tungsten assays from 0.04 to 0.68% WO_3, averaging 0.24% WO_3, and Cu values from 0.05 to 0.98% Cu, averaging 0.27% Cu.

7.2.24. Whiting Creek (Huckleberry Mines Ltd.)

The **Whiting Creek** property is 8 km north of the

Huckleberry mine that is currently on care and maintenance status. Mineralization is in stocks of the Bulkley plutonic suite (Late Cretaceous) that cut Hazelton Group volcanic rock (Lower Jurassic). Chalcopyrite, molybdenite, and pyrite mineralization occurs as veinlets and disseminations. The best grades of mineralization are in zones of potassic alteration. In 2022, exploration consisted of property-wide mapping and sampling to complement airborne lidar and ZTEM geophysical surveys. Samples were analyzed with a handheld XRF unit, then sent for assay and hyperspectral analysis. The program focussed on collecting data to correlate geophysical anomalies for guiding future exploration.

7.3. Selected polymetallic base and precious metal projects

Many polymetallic base and precious metal projects are active throughout the Northwest Region (Fig. 1; Table 5). Base metals are explored for primarily as polymetallic vein, VMS and, to lesser extent, SEDEX and manto replacement deposits.

7.3.1. BA (Mountain Boy Minerals Ltd.)

Mountain Boy's **BA** project is 18 km northeast of Stewart. Highway 37A and the Northwest transmission line run through the property allowing easy access and infrastructure. This year, exploration included geological mapping, rock sampling, and SWIR sampling.

7.3.2. BAM (Jan Copper) (P2 Gold Inc.)

P2 Gold drilled 95 holes totaling 13,967 m at their **BAM** project. Most holes were drilled at the Monarch Gold zone. Results from the Jan Copper zone included 22.0 m grading 0.36% Cu, including 2.0 m of 2.15% Cu.

7.3.3. Blue (Core Assets Corporation)

Core Assets drilled 7371 m in 17 holes at their **Blue** property. Results included 1.25 m grading 215 g/t Ag, 9.9% Zn, 8.9% Pb, and 0.36% Cu within 17.19 m grading 28 g/t Ag, 1.2% Zn, 1.4% Pb, and 0.10% Cu. Core also carried out prospecting and geological mapping.

7.3.4. Bingo (Juggernaut Exploration Ltd.)

In January, Juggernaut Exploration optioned the **Bingo** property in the Eskay rift. Exploration included prospecting, mapping, and rock and soil sampling.

7.3.5. Del Norte (Decade Resources Ltd.)

Decade has an option to earn up to a 55% interest in the **Del Norte** property and can earn an additional 20% interest by carrying the property to commercial production. Drill results from 2021 released early in 2022 included 3.6 m grading 5 g/t Au, 660 g/t Ag and 2.29 m grading 72 g/t Au and 3074 g/t Ag.

7.3.6. Golddigger (Goliath Resources Ltd.)

The **Golddigger** property is 7 km west of the Dolly Varden mine access road. At the Surebet and Main zone, stratabound massive sulphide mineralization (galena-sphalerite-pyrite) and silica alteration occur in highly folded Hazelton Group sedimentary rocks along northwest-trending faults. Goliath completed 26,321 m of diamond drilling in 86 holes at the Surebet zone. Reported results included 1.0 m grading 115.0 g/t Au, and 28.5 g/t Ag, within 5.0 m grading 23.17 g/t Au, and 6.32 g/t Ag along with base metal mineralization.

7.3.7. Kitsault Valley (Dolly Varden Silver Corporation)

In February, Dolly Varden Silver Corporation acquired the Homestake Ridge project from Fury Gold Mines Ltd. and combined resources with the Dolly Varden Silver project to consolidate into the **Kitsault Valley** project. This combines seven precious metal deposits under one project, switching the Company's 100% silver project to a larger one with equal silver and gold resources measured by value. **Homestake Ridge** contains a total Indicated resource (January 2022) of 0.736 Mt grading 7.02 g/t Au, 74.8 g/t Ag, 0.18% Cu and 0.077% Pb and a total Inferred resource of 5.55 Mt grading 4.58 g/t Au, 100 g/t Ag, 0.13% Cu and 0.142% Pb.

The 2022 drilling objective was to infill at **Dolly Varden** and **Homestake Ridge** to increase mineral estimates from Indicated and Inferred to Measured and Indicated. This year Dolly Varden completed 37,061 m of drilling in 108 holes. Reported results from **Homestake Ridge** include 16.06 m grading 4.27 g/t Au and 64 g/t Ag, including 3.08 m grading 18.76 g/t Au, 193 g/t Ag, and 0.28% Cu, 15.0 m grading 5.68 g/t Au and 147 g/t Ag, including 0.39 m grading 54.10 g/t Au, 4890 g/t Ag, and 0.11% Cu. Highlighted results from **Dolly Varden** included 1.6 m grading 4326 g/t Ag, 4.2% Pb, 1.4% Zn, and 1.0 g/t Au, 50.18 m grading 414 g/t Ag, 12.51 m of 442 g/t Ag, 0.26% Pb, and 0.31% Zn including 1.50 m grading 1367 g/t Ag, 0.22% Pb, and 0.17% Zn.

The immediate area of the Dolly Varden property has a long history of mining. Between 1910 and 1959, the Dolly Varden mine produced more than 20 Moz of silver. The property is underlain by Hazelton Group volcanic and volcaniclastic rocks. Historic and recent exploration suggest the potential for epithermal base and precious metal and volcanogenic massive sulphide deposits.

7.3.8. Midas (Juggernaut Exploration Ltd.)

Juggernaut reported discovering new mineralization at their **Midas** project, 24 km southeast of Terrace. Exploration was focussed on delineating the Kokomo showing, which returned elevated gold values in bulk leach extractable gold samples ranging from 0.024 g/t to 0.108 g/t Au. Exploration included rock sampling, prospecting, and geological mapping. Rock chip sample results included 1.0 m grading 117 g/t Au, 132 g/t Pb, 1.585% Cu, and 1.77% Zn.

7.3.9. Rock and Roll (Etruscus Resources Corp.)

The **Rock and Roll** property is 7 km northwest of the past-producing Snip mine. The property includes the Black Dog VMS deposit and the SRV zone. Etruscus carried out 14.25 line-

km of IP, geological mapping, and sampling (128 soil, 70 rock). Results extended quartz-sericite-pyrite porphyry style alteration 700 m east of the discovery zone. Soil sampling extended the anomalous copper-gold-molybdenum Heather zone by 350 m, where a newly identified polymetallic quartz-carbonate vein zone was reported to contain chalcopyrite, sphalerite, and galena.

7.3.10. Silver Queen (Equity Metals Corp.)

The **Silver Queen** historic mine is 43 km south of Houston on an all-season road. It has seen more than 500 drill holes and 9 km of underground workings since discovery. In December, Equity released an updated mineral resource estimate with an Indicated resource of 3.445 Mt grading 3.5% Zn, 2.13 g/t Au, 189 g/t Ag, 0.24% Cu, and 0.6% Pb. An Inferred resource of 1.9 Mt 2.0% Zn, 0.82 g/t Au, 167 g/t Ag, 0.23% Cu, 0.5% Pb (resources at NSR cut off of C$100/t). Equity completed 5891 m of diamond drilling in 16 holes. Highlight results included 1.3 m grading 1998 g/t Ag, 9.3 g/t Au, 0.17% Cu, 2.2% Pb, and 6.8% Zn within a 7.5 m interval grading 539 g/t Ag, 1.8 g/t Au, 0.5% Pb, and 1.8% Zn. Other results included 0.6 m grading 1705 g/t Ag, 2.1 g/t Au, 4.3% Cu, 1.6% Pb, 4.1% Zn, within 1.2 m grading 802 g/t Ag, 1.0 g/t Au, 2.1% Cu, 0.8% Zn, and 2.0% Zn.

7.3.11. Silver Switchback (Norseman Silver Inc.)

Norseman completed 800 m of diamond drilling in four holes at their **Silver Switchback** property. Norseman has an option agreement with Cloudbreak Discovery Corp. to acquire 100 percent interest in the claims. Part of the option agreement is to spend $475,000 in exploration expenditures on the property within three years.

7.3.12. Silvertip (Coeur Mining Inc.)

Coeur's 2022 exploration program included 61,000 m of drilling in 330 holes at the historic **Silvertip** mine. The focus of drilling was infill and expansion at the Southern silver zone and drilling underneath the Discovery zone. More manto mineralization was found at the newly discovered Camp Creek west zone. Drilling intersected chimney/feeder structures beneath the Discovery zone. Highlight results included 12 m grading 459.6 g/t Ag, 15.1% Zn, and 8.7% Pb, and 6.2 m grading 778.3 g/t Ag, 13.6% Zn, and 14.7% Pb.

7.3.13. Southmore (Mountain Boy Minerals Ltd.)

At their **Southmore** project, Mountain Boy carried out geological mapping, ground truthing geophysical anomalies, and soil and rock sampling.

7.3.14. Terrace (Decade Resources Ltd.)

The **Terrace** project consists of three main properties: Terrace gold, Treasure Mountain, and Dardanelle approximately 20 km east of Terrace. The project consists of 48 contiguous claims totalling 17,470 hectares. Decade carried out 1000 m of diamond drilling in four holes, rock sampling, and prospecting, mostly at the Terrace gold property. Drilling tested the Excelsior and Croesus showings for porphyry copper potential. The company reported narrow zones of quartz veining containing chalcopyrite, with one hole displaying molybdenum mineralization on fracture faces and in quartz veinlets.

7.3.15. Theia (Mountain Boy Minerals Ltd.)

Exploration for 2022 at Mountain Boy's **Theia** polymetallic vein project consisted of prospecting, rock sampling, and sampling for geochronology. The company plans to calculate lead isotope age dates for mineralization from galena.

7.3.16. Zinc Bay (Guardsmen Resources Inc.)

Precious metal-bearing, base-metal sulphide veins at the **Zinc Bay** property are in shear zones or narrow brittle structures. Exploration by Guardsmen in 2022 consisted of an IP survey, soil sampling, prospecting, and geological mapping.

7.4. Selected mafic- and ultramafic-hosted projects

The Northwest Region contains a few active mafic- and ultramafic-hosted projects (Fig. 1; Table 5).

7.4.1. E&L (Garibaldi Resources Corp.)

The **E&L** property is one of few known high-grade magmatic Ni-Cu-(PGE) massive sulphide projects in the Canadian Cordillera. The property is in the Eskay rift. The deposit contains pyrrhotite, pentlandite, and chalcopyrite in an olivine gabbro stock that intrudes Lower Jurassic sedimentary and volcanic rocks. Garibaldi completed 2200 m of drilling in 4 holes. Drilling intersected nickel-bearing disseminated and semi-massive sulphide mineralization (Fig. 9), extending mineralization at depth by 205 m.

Fig. 9. Semi-massive sulphide mineralization (pyrite, chalcopyrite, pyrrhotite, pentlandite) in gabbro, E&L project.

7.4.2. Turnagain (Giga Metals Corp.)

The **Turnagain** nickel-cobalt deposit is an Alaskan-type Pt-(Os-Rh-Ir) ultramafic. The deposit has maximum dimensions of 3 by 8.2 km and displays a dunite core surrounded by peripheral peridotites, pyroxene-rich peridotite, wehrlite, and olivine pyroxene. Sulphide mineralization includes

pyrrhotite, pentlandite, chalcopyrite, and trace bornite. Giga Metals completed a joint venture transaction with Mitsubishi Corporation to earn 15% equity interest in Turnagain project and form a new company, Hard Creek Nickel Corp. In 2022, Giga Metals released an updated, increased mineral resource assessment with total Measured and Indicated resources of 1.519 Bt at 0.21% Ni and 0.013% Co, and an Inferred resource of 1.222 Bt at 0.206% Ni and 0.012% Co. Giga carried out 415 m of geotechnical drilling, collected geotechnical data and have ongoing engineering and metallurgical studies to advance project to the pre-feasibility level.

8. Geologic research

Nelson et al. (2022) continued long-term investigations into the evolution of Stikinia and adjacent terranes in northwestern British Columbia, presenting U-Pb detrital zircon data from the Stuhini and Hazelton groups to reconstruct the uppermost Triassic and Lower Jurassic pre-accretionary arc and early syn-accretionary back arc paleogeography and paleotectonics of the region. Nelson et al. (2022) also examined the relationships between Stikinia, Yukon-Tanana terrane, the Whitehorse trough, Quesnellia, and Cache Creek terrane. With a Yukon perspective, Colpron et al. (2022) also examined the uppermost Triassic to Jurassic transition from arc to syn-collisional magmatism and tectonics in Stikinia and Yukon-Tanana terrane, the development of the Whitehorse trough, and enclosure of Cache Creek terrane between Stikinia and Quesnellia. Kellett and Zagorevski (2022) combined geochronological and thermochronological data and clast compositions of detrital zircon and apatite from Lower to Middle Jurassic siliciclastic rocks of the Laberge Group in the Whitehorse trough. The study evaluated the unroofing history and dissection of source terranes, possible depocentre migration, and potential structural controls on the thermal history of the basin. Parsons et al. (2022) used U-Pb detrital zircon data from south-central Yukon to consider the crustal structure of Yukon-Tanana terrane and the timing of collision between it and North America. Focussing on the Canadian tungsten belt in Yukon, Elongo et al. (2022) used Nd isotopic data to interpret that large Cordilleran tungsten deposits were originally sourced from Mesoarchean to Paleoproterozoic mantle and that they record scavenging of material from Neoproterozoic to Devonian sedimentary successions deposited along the western margin of ancestral North America during emplacement of mid-Cretaceous peraluminous intrusions.

New bedrock geology maps were published for the western Skeena arch region (Angen et al., 2022), the Turtle Lake area (Mihalynuk et al., 2022) and the Dease Lake region (van Straaten et al. 2022a). Hunter et al. (2022) presented geochronologic data from the Kitsault area as part of a project that is being continued by Miller et al. (2023). Johnston et al. (2023) conducted a structural study in the western part of the Galore Creek area, and van Straaten et al. (2023) examined the stratigraphy and depositional setting of units in the Stuhini Group and provided initial geochronologic data. van Straaten et al. (2022b) released igneous geochemical data from across the Northwest Region and, using modern high-precision techniques, Van der Vlugt, et al. (2022) reanalyzed almost 1000 archived igneous samples. Lett et al. (2022) provided historical heavy mineral and geochemical data from stream-sediment, stream-water, and moss-mat sampling. At the Red Chris mine, Day and Eduardo Marquez (2022) examined the leachable selenium content of gossanous and weathered rock and concluded that higher concentrations and higher ratios of selenium to sulfur relative to deeper bedrock record the remnant of a Paleogene oxidized weathering profile partially eroded in the Quaternary.

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