Exploration and Mining in British Columbia, 2022: A summary



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1. Introduction

Reflecting its complex geological history, British Columbia is endowed with diverse minerals and deposit types (Fig. 1). British Columbia is Canada's largest exporter of metallurgical coal, leading producer of copper, and only producer of molybdenum. Also produced are significant amounts of gold, silver, lead, and zinc, and more than 30 industrial minerals including gypsum, magnesite, limestone, and dimension stone. Numerous quarries produce sand and gravel or crushed aggregate. Flanked by the Pacific Ocean, British Columbia offers easy access to global markets. Mine operations benefit from tax incentives and a well-developed infrastructure, including low-cost electricity, an integrated road and rail network, and large deep-water ports. Exploration benefits from an extensive geoscience database and a web-based mineral tenure system.

The following report summarizes the chapters prepared by the British Columbia Geological Survey Regional Geologists that are presented elsewhere in this volume. The Regional Geologists (Fig. 2; Table 1) represent the provincial government on geological matters at a regional level. Within their communities, they provide information on exploration trends, possible investment opportunities, land use processes, First Nation capacity building, and public outreach.

Noteworthy acquisitions and earn ins 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 Quest Ex properties (Heart Peaks, Castle, Moat, Coyote, and North ROK) 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.

Homestake's adjacent tenure was consolidated with the Dolly Varden project (Dolly Varden Silver Corp.) to form the new **Kitsault Valley** project. Brixton Metals Corporation announced a \$13.6 million strategic investment by BHP Group Limited to advance their **Thorn** project, and Conuma Resources Limited recently purchased the closed **Quintette** mine from Teck Resources Limited for \$120 million. Conuma will also pay an ongoing 25% net profits royalty, starting once it recovers its investment. Freeport-McMoRan Mineral Properties Canada Inc. continued to earn in at Amarc Resources Ltd.'s **Joy** project by spending approximately \$14 million. Amarc also announced an earn-in agreement with Boliden Mineral Canada Ltd., a wholly owned subsidiary of the Boliden Group, on its **Duke** project. Boldien may earn up to 70% by making staged exploration and development investments totalling \$90 million.

Two mine development projects were underway. 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, with a planned start in Q4 2023 and the first gold pour in early 2024. Artemis Gold Inc. announced fulfilling all EA (environmental assessment) conditions to start preparing the plant site for their **Blackwater Gold** project. This work started in 2022 with clearing, bulk earthworks, and erosion control. The first gold pour is planned for Q3 2024.

The Government of Canada determined that the proposed **Sukunka** mine project (Glencore plc and JX Nippon Oil and Energy Corporation) would have significant adverse environmental effects that could not be mitigated and declined to approve the project.

Low-carbon energy technologies demand critical minerals, but the highly globalized supply chain of critical minerals and products is vulnerable to disruption. Furthermore, increased

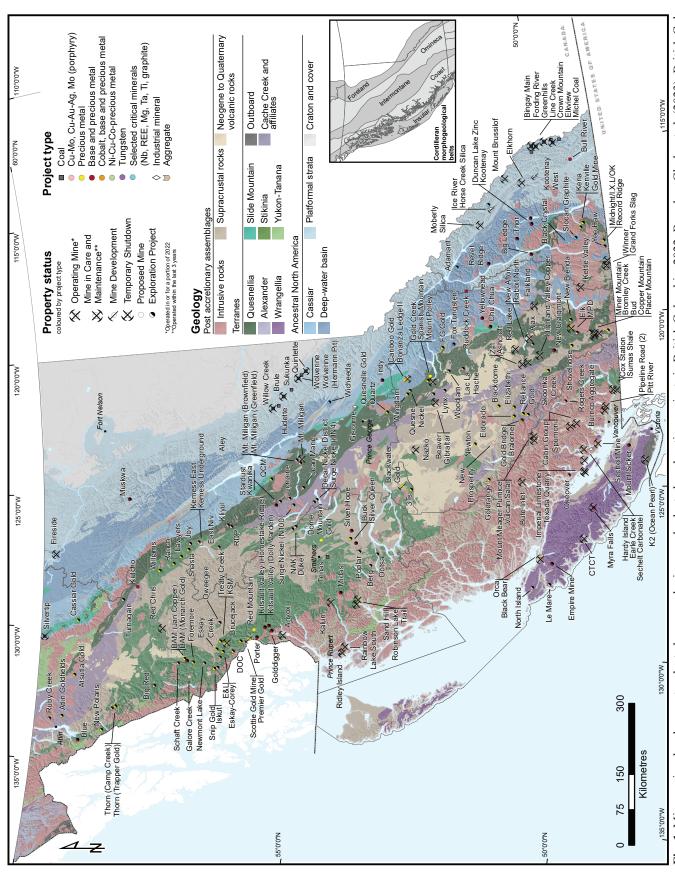


Fig. 1. Mines, mine development, selected proposed mines, and selected exploration projects in British Columbia, 2022. Based on Clarke et al. (2023), British Columbia Geological Survey Open File 2023-01.



Fig. 2. Mineral Development Office regions and Regional Geologist offices.

use of green technologies is increasing the demand for many metals, which could lead to shortages in the next few decades. Based on specific demands and vulnerabilities to supply, different countries have produced different critical minerals lists. Canada's list, released in 2021, includes a suite of 27 elements, two groups of elements (platinum group metals and rare earth elements) and two minerals (fluorspar, potash). The list is considered critical for the continued economic success of Canada as it transitions to a green economy. British Columbia is Canada's largest producer of copper and metallurgical coal and only producer of molybdenum, and also produces zinc and manganese. The four metals are elements on Canada's list, and metallurgical coal is required for high-quality steel. British Columbia has near-term potential to contribute significantly to the production of other critical metals required for a green economy including nickel, rare earth elements, niobium, tantalum, tungsten, and cobalt.

While Covid continued to cause minor interruptions, 2022 did not have the significant forest fire and flooding disruptions of 2021. Provincial mining production reached a new high due to continued high coal prices. The year started with significant

exploration financing in place and exploration expenditures improved for the third year in a row, reaching a new record level.

2. Mine production

The Ministry of Energy, Mines and Low Carbon Innovation forecasts the total value of mine production for 2022 at \$18.2 billion including coal, copper, gold, industrial minerals, aggregate, zinc, silver, molybdenum, and lead (Fig. 3). This forecast is \$4.3 billion higher than the 2021 preliminary estimate of \$13.9 billion made by the Ministry using Natural Resources Canada values (Fig. 4) and is due to increased coal prices. Coal started the year over 350 US\$/t, peaked at over 670 US\$/t in March, and in late December was approximately 280 US\$/t.

As in previous years, coal was the highest value mine product (67.0%), followed by copper (17.8%). In 2022, 11 metal mines operated during at least part of the year (Fig. 1; Table 2). Metallurgical coal was produced at four open-pit operations in the southeastern part of the province and three open-pit operations in the northeastern part (Fig. 1; Table 2). About 30

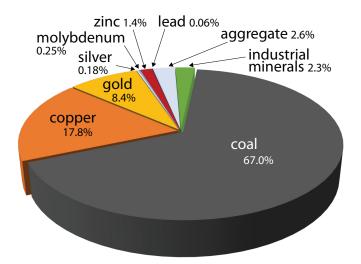


Fig. 3. 2022 forecast value of British Columbia mineral production by commodity; total is \$18.2 billion.

Table 1. Mineral Development Office and Regional Geologist contact information.

Region	Community	Regional Geologist	Phone	email
Northwest	Smithers	Nate Corcoran	250-876-6707	Nathan.Corcoran@gov.bc.ca
Northeast and North Central	Prince George	Hassan Heidarian	250-649-2977	Hassan.Heidarian@gov.bc.ca
South Central	Kamloops	Cary Pothorin	250-816-1940	Cary.Pothorin@gov.bc.ca
Southeast	Cranbrook	BCGS	250-952-0372	Geological.Survey@gov.bc.ca
Southwest	Vancouver	Bruce Northcote	604-660-2713	Bruce.Northcote@gov.bc.ca
Mineral Development Office	Vancouver	Gordon Clarke	604-660-2094	Gordon.Clarke@gov.bc.ca

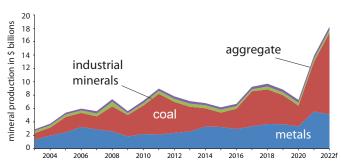


Fig. 4. Value of British Columbia mineral production by year 2002-2022; value for 2022 is forecast.

industrial mineral mines and more than 1000 aggregate mines and quarries were in operation.

3. Mining highlights

3.1. Metal mines

Metal mines accounted for \$5.12 billion (forecast) of all mine production in 2022, representing about 28.1% of total output (Fig. 3). Eleven mines produced in 2022 (Fig. 1; Table 2).

Brucejack (Newcrest Mining Limited) and Red Chris (Newcrest Mining Ltd. 70% and Imperial Metals Ltd. 30%) were the producing metal mines in the Northwest Region. At the Brucejack mine, 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. The Brucejack ore body incorporates the Valley of the Kings (VOK) and West zones. 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. Work is in progress to revise ore resources and reserves estimates. Resource drilling expanded the VOK deposit, confirming continuity of high-grade mineralization at depth. Exploration drilling continues to produce good results for the Marmot zone, which was discovered 3.5 km north of the mine in 2021. At the **Red Chris** mine, 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. 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 0.35g/t Au, and 0.50% Cu, including 56 m grading 0.83 g/t Au, and 0.80% Cu, and 22 m grading 1.1g/t Au and 0.93% Cu. Block cave underground mine operation plans are on track.

In the North Central Region, the **Mt. Milligan** open-pit copper-gold mine is in its ninth year. Production to the end of the 3rd quarter totalled 57.0 Mlb of Cu and 136,000 oz Au. Within the mine lease, 26,873 m of drilling in 46 holes was

completed. The drilling was split between better defining known resources and expanding resources.

In the South Central Region, operating mines include the two largest copper-molybdenum producers (Gibraltar and Highland Valley Copper) and two major copper-gold mines (New Afton and Copper Mountain). A third copper-gold producer, Mount Polley, restarted in 2022. The region hosts two small precious metal mines, Bonanza Ledge II and Elk. Barkerville Gold Mines Ltd. (now under Osisko Development Corp.) restarted the Bonanza Ledge mine in 2017 as an underground long-hole and cemented fill operation below the existing pit. Osisko Development Corp. began a second phase of underground mining (Bonanza Ledge II) in 2021 that was suspended in June 2022.

At the **Copper Mountain** mine, production to the end of the third quarter totalled 39.6 Mlbs Cu, 16,980 oz Au, and 181,953 oz Ag. After commissioning a third ball mill, current mill production is 45,000 tpd. Further mill expansion to 65,000 tpd, to be commissioned by 2028, is projected to increase annual production to 138 Mlb Cu. Following a resource expansion drilling program completed in early 2022, reserves increased by 57% to Proven and Probable 702 Mt at average grades of 0.24% Cu, 0.10 g/t Au, and 0.71 g/t Ag. Measured and Indicated mineral resources inclusive of reserves are 1.132 Bt at 0.22% Cu, 0.09 g/t Au, and 0.64 g/t Ag. Projected mine life is now 32 years (up from 21 years), accounting for the planned increase in production.

Gold Mountain Mining Corp. began mining operations at the **Elk** mine in November of 2021. A 2021 updated Preliminary Economic Assessment considers a 70,000 tpy open pit-only operation expanding to 324,000 tpy open pit and underground after three years. As of December 2021, the total property combined pit-constrained and underground resources were estimated at 4.359 Mt Measured + Indicated grading 5.6 g/t Au and 11.0 g/t Ag, and 1.497 Mt Inferred grading 5.3 g/t Au and 14.4 g/t Ag.` The total mine life would be 11 years with 570,388 oz Au produced. Ore is trucked to New Afton for processing under an agreement with New Gold Inc. In the first nine months of 2022, the company reported sales of 3588 oz Au in crushed ore and production of 34,182 t at a grade of 3.62 g/t Au.

At the **Gibraltar** mine, Taseko Mines Limited mined 65.7 million tons in the first 9 months of 2022 and produced concentrate containing 70.3 Mlb Cu and 759,000 lb Mo. Production was affected by lower-than-expected head grades early in the year. Production improved in Q3 as mining progressed deeper into the Gibraltar pit, which is to be the primary source of ore in 2023. Stripping will begin at the new Connector pit. Taseko announced a new Proven and Probable reserve estimate of 706 million tons grading 0.25% Cu. Projected mine life increased to 23 years with an average annual production of 129 million lbs Cu and 2.3 million lbs Mo.

At the **New Afton** mine, New Gold Inc. reported production to the end of the third quarter as 24.1 Mlb Cu and 30,610 oz Au. New Gold received a Mines Act permit amendment allowing

Table 2. Operating metal mines, 2022, forecast mine production, reserves, and resources.

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Mine	Region	Operator (partner)	Commodity; Deposit type; MINFILE	Forecast 2022 Production (based on Q1- Q3)	Reserves	Resource	Comments
Brucejack	Northwest	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	Northwest	Newcrest Mining Limited 70%, Imperial Metals Corp. 30%	Cu, Au, Ag; Hybrid calcalkalic 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.
Mt. Milligan	North Central	Centerra Gold Inc.	Cu, Au, Ag; Alkalic porphyry Cu- Au; 093N 194, 191	75.9 Mlbs Cu 181,000 oz Au	P+Pr: 246.2 Mt 0.23% Cu, 0.37 g/t Au	M+I: 189 Mt 0.18% Cu, 0.30 g/t Au (additional to reserves)	Concentrator design capacity 60,000 tpd. Mine life extended by over four years. More than 350 employees. Approximately 27,000 m of diamond drilling in 46 holes completed in 2022.

Table 2. Continued.

Bonanza Ledge II	South Central	Osisko Development Corp.	Au; Au-quartz veins; 093H 140	7153 oz Au	na	M: 47 t 5.1 g/t Au I: 32 Mt 4.0 g/t Au M+I: 12,000 oz Au	Production at Bonanza Ledge was suspended June 2022.
Copper Mountain	South Central	Copper Mountain Mining Corporation 75%, Mitsubishi Materials Corporation 25%	Cu, Au, Ag; Porphyry Cu- Au, Alkalic; 092HSE001	52.8 Mlb Cu 22,600 oz Au 242,600 oz Ag	P+Pr: 702 Mt 0.24% Cu, 0.10 g/t Au, 0.71 g/t Ag	M+I: 1.132 Bt 0.22% Cu, 0.09 g/t Au, 0.64 g/t Ag	Increased resources and reserves. Resources inclusive of reserves.
Elk	South Central	Gold Mountain Mining Corp.	Au, Ag; Au quartz veins; 092HNE009, 295, 41, 261	22,164 t 3.68 g/t Au mined in first 6 months of 2022	na	M+I: 4.359 Mt 5.6 g/t Au, 11.0 g/t Ag Inf: 1.497 Mt 5.3 g/t Au, 14.4 g/t Ag	Effort to improve grade control may change production in H2. Exploration is ongoing.
Gibraltar	South Central	Taseko Mines Limited 75%, Cariboo Copper Corp. 25%	Cu, Mo; Porphyry Cu±Mo±Au; 093B 012	93.9 Mlb Cu 1.0 Mlb Mo	P+Pr: 706 million short tons 0.25% Cu, 0.008% Mo (sulphide mineral reserves) P+Pr: 17 short tons 0.15% (acid soluble Cu)	M+I: 1.215 million short tons 0.24% Cu, 0.007% Mo (inclusive of reserves)	Trend toward improving production in Q3. Reserves increased over previous year for a 23 year projected mine life.
Highland Valley Copper	South Central	Teck Resources Limited	Cu, Mo; Porphyry Cu±Mo±Au; 092ISW012, 45	268.1 Mlb Cu 1.1 Mlb Mo	P+Pr: 338.3 Mt 0.31% Cu, 0.008% Mo	M: 582.8 Mt 0.30% Cu, 0.009% Mo I: 626.7 Mt 0.26% Cu, 0.010% Mo Inf: 232.3 Mt 0.22% Cu, 0.007% Mo	HVC 2040 project, if implemented, would extend mine life from 2028 to 2042.

Table 2. Continued.

Mount Polley	South Central	Imperial Metals Corporation	Cu, Au, Ag; Porphyry Cu- Au, Alkalic; 093A 008	>5 Mlb Cu (2.4 Mlb produced during Q3	P+Pr: 53.8 Mt 0.34% Cu, 0.30 g/t Au, 0.90 g/t Ag	M+I open pit: 186.9 Mt 0.27% Cu, 0.28 g/t Au, 0.49 g/t Ag M+I underground: 7.4 Mt 0.29% Cu, 0.29 g/t Au, 6.57 g/t Ag	Reserves and resources estimated in 2016 adjusted for mining to 2020. Q3 production was a ramp-up period. Production expected to increase in Q4.
New Afton	South Central	New Gold Inc.	Au, Ag, Cu; Porphyry Cu- Au, Alkalic; 092INE023	32.1 Mlb Cu 40,800 oz Au	P+Pr: 41.3 Mt 0.67 g/t Au, 1.8 g/t Ag, 0.74% Cu	M+I: 64.9 Mt 0.56 g/t Au, 2.0 g/t Ag, 0.70% Cu (exclusive of reserves)	Underground exploration drilling results to be incorporated in 2022 year-end resource estimates.
Myra Falls	Southwest	Myra Falls Mine Ltd. (Part of Trafigura Mining Group)	Zn, Cu, Pb, Ag, Au; Kuroko massive sulphide; 092F 330, 71, 72, 73	Not reported. Mill capacity 2000 tpd. Long term target 800,000 tpy of ore	P+Pr: 4.7 Mt 7.11% Zn, 0.78% Pb, 0.92% Cu, 76.55 g/t Ag, 1.78 g/t Au	M+I: 7.64 Mt 6.59% Zn, 0.72% Pb, 0.99% Cu, 72.52 g/t Ag, 1.79 g/t Au	Trafigura indicates the mine has reserves and resources sufficient for 10 years operation. Exploration is ongoing.

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

mining of the C-Zone in October (below and extending west of the current mining area). Development of the C-Zone is continuing, with production anticipated in 2023. Electrification is part of the plan at New Afton. An electric scoop has been in operation since 2021 and electric haul trucks were purchased in 2022. The company reported underground exploration drilling at the mine, with underground results to be included in the 2022 year-end mineral resource estimate. Surface exploration drilling at the Cherry Creek trend 3 km west of the mine concluded and there was reconnaissance drilling (5000 m) 8 km southwest of the mine.

The Southwest Region has one operating metal mine, Myra Falls. Trafigura Mining Group, part of Trafigura Group Pte. Ltd. acquired the Myra Falls underground Zn-Cu-Pb-Ag-Au mine in 2020 from Nyrstar N.V. Trafigura is a private multinational commodity trading company and is not required to publish compliant production or reserves figures. However, they reported continuing to ramp up to a target throughput of 800,000 tpy of ore and estimate the operation has approximately 10 years of reserves. The mine has a history of replacing reserves through exploration, which continued in 2022. Ability to store tailings may place limitations on mine life before exhaustion of resources.

3.2. Coal mines

Seven coal mines (Fig. 1; Table 3) accounted for a forecast production of \$12.2 billion for 2022. This production represents

about 67.0% of all total mining output in the province. Coal was produced at four large open-pit operations of Teck Coal Limited (Elkview, Fording River, Greenhills, Line Creek) in southeastern British Columbia and three open-pit operations of Conuma Resources Limited (Brule, Willow Creek, Wolverine) in northeastern British Columbia.

3.3. Industrial minerals and aggregates

About 30 industrial mineral mines and more than 1000 aggregate operations are active in British Columbia (selected operations are listed in Table 4). With forecast production figures for industrial minerals of \$425 million (2.3% of total mining production) and for aggregates of \$481 million (2.6% of total mineral production), these operations are important to the economy of the province.

In the Northwest Region, Tru-Grit Abrasives is recycling slag at the historic **Anyox** site, where slag was created from smelting copper. Numerous aggregate and quarry operations supply sand and gravel and blasted stone for large-scale industrial projects and municipalities throughout the region. 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.

In the Northeast Region, Fireside Minerals Ltd. mines veins

Table 3. Operating coal mines, 2022, forecast mine production, reserves, and resources.

Mine	Region	Operator (partner)	Commodity; Deposit type; MINFILE	Forecast 2022 Production (based on Q1- Q3)	Reserves	Resource	Comments
Brule	Northeast	Conuma Resources Limited	PCI; Bituminous coal; 093P 007	1.9 Mt	P+Pr: 2.3 Mt	na	About 300 employees.
Willow Creek	Northeast	Conuma Resources Limited	HCC, PCI; Bituminous coal; 093O 008	1.0 Mt	P+Pr: 8.6 Mt	na	About 300 employees, mine and plant.
Wolverine	Northeast	Conuma Resources Limited	HCC; Bituminous coal; 093P 025	1.1 Mt	P+Pr: 2.3 Mt	na	About 300 employees, mine and plant.
Elkview	Southeast	Teck Coal Limited 95%, Nippon Steel & Sumitomo Metal Corporation 2.5%, POSCO 2.5%	HCC; Bituminous coal; 082GNE016,	5.4 Mt	na	na	Teck estimates a remaining reserve life of approximately 29 years at the current production rate.
Fording River	Southeast	Teck Coal Limited	HCC; Bituminous coal; 082JSE012	8.2 Mt	na	na	The focus for development in 2022 was the Fording River Extension project. Proven and Probable reserves sufficient for 27 years mine life; increase to 47 years including the Fording River Extension project.
Greenhills	Southeast	Teck Coal Limited 80%, POSCO Canada Limited ('POSCAN') 20%	HCC; Bituminous coal; 082JSE007, 10	6.3 Mt	na	na	Proven and Probable reserves are projected to support another 46 years of mining at planned production rates.
Line Creek	Southeast	Teck Coal Limited	HCC, TC; Bituminous coal; 082GNE020	3.4 Mt	na	na	Proven and Probable reserves at Line Creek are projected to suppor planned production rates for a further 14 years.

HCC = hard coking coal; PCI = pulverized coal injection; TC = thermal coal P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

Table 4. Selected operating industrial mineral mines and quarries, 2022, forecast mine production, reserves, and resources.

Mine	Region	Operator (partner)	Commodity; Deposit type; MINFILE	Forecast 2022 Production (based on Q1- Q3)	Reserves	Resource	Comments
Anyox	Northwest	Tru-Grit Abrasives	Slag	na	na	na	Slag is mined, cleaned, and barged for roofing and sand for sand blasting.
Kalum	Northwest	Kalum Quarry Ltd.	Industrial rock; Crushed rock	na	na	na	Drilling, blasting, crushing, production for CN Railway and others.
Rainbow Lake South	Northwest	Spring Creek Aggregates Ltd.	Industrial rock; Crushed rock	na	na	na	Drilling, blasting, crushing, production for CN Railway and LNC projects
Ridley Island	Northwest	Terus Construction Ltd.	Industrial rock; Crushed rock	na	na	na	Drilling, blasting, crushing, production for CN Railway and LNC projects.
Robinson Lake Trail	Northwest	Haisla & Progressive Ventures Construction Ltd.	Industrial rock; Crushed rock	na	na	na	Drilling, blasting, crushing, production for CN Railway and LNC projects.
Sand Hill	Northwest	Terus Construction Ltd.	Industrial rock; Crushed rock	na	na	na	Crushing for CN Railway and LNC projects.
Fireside	Northeast	Fireside Minerals Ltd.	Barite; Vein barite; 094M 003, 19	na	na	na	Fireside Minerals produces 4.1 API spec barite for sal into the western Canadian oil and gas markets.
Ashcroft	South Central	IG Machine and Fibers Ltd. (IKO Industries Ltd.)	Basalt (roofing granules); 092INW104	300,000 t	na	Approx. 13.3 Mt in 2002	Typically mines 500,000 t with 60% processed into granule products.
Bromley Creek (Zeotech)	South Central	Progressive Planet Products Inc. (International Zeolite Corp. 77%), Progressive Planet Solutions Inc. 23%	Zeolite; Open system zeolites; 092HSE243	na	na	M+I (as of 2013- 06-30): 50,000 t	Progressive Plane has an agreement to acquire 50%.
Bud	South Central	Progressive Planet Products Inc.	Bentonite; 092HSE162	Approx. 20,000 t annually	na	na	Progressive Plane Solutions Inc. acquired in 2022.

Table 4. Continued.

Falkland	South Central	Lafarge Canada Inc.	Gypsum; 082LNW001	10,000- 20,000 t annually	na	Approx. 1.8 Mt	Found alternate uses since closure of Lafarge's Kamloops cement plant.
Kettle Valley Quarries	South Central	Kelowna Sand and Gravel Ltd./Kettle Valley Stone Company	Ashlar, flagstone, thin veneer; 082ENW109, 111, 112	na	na	na	
Nazko	South Central	CanLava Mining Corporation	Lava rock; Cinder cone; 093B 060	na	na	Historical: 45 Mt	
Red Lake	South Central	Progressive Planet Products Inc.	Diatomaceous earth; Lacustrine diatomite; 092INE081	Approx. 30,000 t annually	na	na	Progressive Planet Solutions Inc. acquired in 2022.
Z-1	South Central	Progressive Planet Solutions Inc.	Zeolite; Open system zeolites; 092INW095	na	na	Approx. 800,000 t	Historical resource.
Elkhorn	Southeast	CertainTeed Gypsum Canada Inc.	Gypsum; Bedded gypsum; 082JSW021	na	na	na	Elkhorn site nearing end of mine life. Operations will be transferred to the developing Kootenay West site.
Grand Forks Slag	Southeast	Pacific Abrasives and Supply Inc.	Slag; Tailings; 082ESE264	na	na	na	Seasonal operation.
Moberly Silica	Southeast	Vitreo Minerals Ltd.	Silica; Industrial silica; 082N 001	About 60 kt product on contract for sales through 2022	na	na	About 200 kt of stockpiled material on site from 2019 mining operations. No mining in 2022.
Mount Brussilof	Southeast	Baymag Inc.	Magnesite; Sparry magnesite; 082JNW001	230 kt	na	na	Material is coarse crushed on site and trucked to processing facility in Exshaw, AB.
Winner	Southeast	Rockwool Inc.	Gabbro/basalt; Crushed rock, for mineral wool; 082ESE265	na	na	na	Seasonal operation.
Bute Inlet	Southwest	Ironwood Clay Company Inc.	Clay; Sedimentary kaolin? (or illite)	na	na	na	Intermittent mining as needed.

Table 4. Continued.

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Southwest	Northwest Landscape and Stone Supply Ltd.	Landscaping stone	na	na	na	
Southwest	Mainland Construction Materials ULC	Aggregate; Crushed rock; 092GSE103	Approx. 3-4 Mty	na	na	River and rail access.
Southwest	Vancouver Island Marble Quarries Ltd.	Marble; Limestone; 092E 020	Typically, about 400 t annually	na	na	Supplies Matrix Marble and Stone Inc.
Southwest	Lafarge Canada Inc.	Sand and Gravel	Typically, >1 Mty	na	na	Material barged.
Southwest	Garibaldi Pumice Ltd.	Pumice; Volcanic ash; 092JW 039	Typically, 10,000- 20,000 m ³	na	11,396,000 m ³ pumice 4,990,000 m ³ pumicite (fines)	2014 resource. There has been both exploration and production since.
Southwest	Hardy Island Granite Quarries Ltd.	Dimension stone, building stone; Dimension stone-granite; 092F 425	3000-5000 tpy	na	Approx. 100,000 t	
Southwest	Imperial Limestone Co. Ltd.	Limestone; Limestone; 092F 394	Approx. 600,000 tpy	na	75 years	250,000 to 275,000 t high purity product + cement feedstock.
Southwest	K2 Stone Quarries Inc.	Dimension stone, flagstone; Flagstone; 092C 159	15,000- 20,000 t annually	na	na	Production number represents material extracted.
Southwest	Great Pacific Pumice Inc.	Pumice; Volcanic ash; 092JW 039	na	na	na	Production as required.
Southwest	Polaris Minerals Corporation (Vulcan Materials Company and 'Namgis First Nation)	Sand and Gravel	Up to 6 Mty	na	121.6 Mt initial resource (2005)	Recently 3.5 to 5 Mty increase in mine plan. Vulcan Materials Company acquired previous owner US Concrete Inc. The quarry has a freighter loading facility.
Southwest	Lehigh	Sand and	na	na	na	Two adjacent
	Southwest Southwest Southwest Southwest Southwest	Southwest Mainland Construction Materials ULC Southwest Vancouver Island Marble Quarries Ltd. Southwest Lafarge Canada Inc. Southwest Garibaldi Pumice Ltd. Southwest Imperial Limestone Co. Ltd. Southwest Vancouver Island Marble Quarries Ltd. Southwest Garibaldi Pumice Ltd. Southwest Imperial Limestone Co. Ltd. Southwest Vancouver Island Maraite Quarries Ltd. Southwest Polaris Minerals Corporation (Vulcan Materials Company and 'Namgis First	Supply Ltd. Southwest Mainland Construction Materials ULC Southwest Vancouver Island Marble Quarries Ltd. Southwest Lafarge Canada Inc. Southwest Garibaldi Pumice Ltd. Southwest Hardy Island Gravel Southwest Unice Ltd. Southwest Hardy Island Granite Quarries Ltd. Southwest Imperial Limestone; 092F 425 Southwest Limestone Co. Ltd. Southwest K2 Stone Quarries Inc. Southwest Great Pacific Pumice; Volcanic ash; 092JW 039 Southwest Great Pacific Pumice; Volcanic ash; 092F 394 Southwest Great Pacific Pumice; Volcanic ash; 092F 394 Southwest Great Pacific Pumice; Volcanic ash; 092JW 039 Southwest Organica Stone; Flagstone; 092C 159 Southwest Great Pacific Pumice; Volcanic ash; 092JW 039 Southwest Corporation (Vulcan Materials Company and Namgis First Store)	Suphy Ltd. Southwest Mainland Construction Materials ULC Southwest Vancouver Island Marble Quarries Ltd. Southwest Canada Inc. Southwest Garibaldi Pumice; Typically, 10,000-092JW 039 Southwest Hardy Island Granite Quarries Ltd. Southwest Limestone; 092E 020 Southwest Pumice Ltd. Southwest Imperial Limestone Co. Ltd. Southwest K2 Stone Quarries Inc. Southwest Race Pacific Pumice; Dimension stone, 20,000 tpy 18,000-092F 394 Southwest Race Pumice Dimension stone, 20,000 tpy 18,000-092F 394 Southwest Race Pumice Dimension stone, 20,000 tpy 18,000-092F 394 Southwest Race Pacific Pumice; Pumice; 18,000-3000 tpy 18,000-3000	Southwest Mainland Construction Materials ULC Southwest Vancouver Island Marble Quarries Ltd. Southwest Lafarge Canada Inc. Southwest Pumice Ltd. Southwest Unice Ltd. Southwest Canada Inc. Southwest Pumice Ltd. Southwest Canada Inc. Southwest Pumice Ltd. Southwest Pumice Ltd. Southwest Canada Inc. Southwest Pumice Ltd. Southwest Canada Inc. Southwest Pumice Ltd. Southwest Canada Inc. Southwest Canada Inc. Southwest Pumice Ltd. Southwest Canada Inc. Southwest Conada Inc. Southwest Canada Inc. Southwest Polaris Southwest Polaris Southwest Corporation (Vulcan Materials Company and 'Namgis First' Southwest Company and 'Namgis First' Southwest Company and 'Namgis First'	Suptly Ltd. Southwest Mainland Construction Materials ULC Southwest Vancouver Island Marble Limestone; O92E 020 annually Southwest Lafarge Canada Inc. Southwest Pumice Ltd. Southwest Lafarge Canada Inc. Southwest Pumice Ltd. Southwest Pumice Ltd. Southwest Rardy Island Granite Quarries Ltd. Southwest Pumice Ltd. Southwest Pumice Ltd. Southwest Pumice Ltd. Southwest Rardy Island Granite Quarries Ltd. Southwest Pumice Ltd. Southwest Pumice Ltd. Southwest Pumice Ltd. Southwest Pumice Ltd. Southwest Stone; Sone, Higgstone; Flagstone; O92E 394 Southwest Pumice Inc. Southwest Polaris Minerals Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Polaris Minerals Company and Namgis First Inc. Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Corporation (Vulcan Materials Company and Namgis First Inc.) Southwest Cranite Crush of Pumice (Trush Inc.) Southwest Cranite Crush of Pumice (Trush Inc.) Southwest Cranite Crush of Pumice (Trush Inc.) Southwest Polaris (Trush Inc.) Southwest Cranite Crush of Pumice (Trush Inc.) Southwest Cranite Crush of Pumice (Trush Inc.) Southwest Polaris (Trush Inc.) Southwest Pumice (Trush Inc.) Southwest Polaris (Trush Inc.) Southwest Pumice (Trush Inc.) Southwest Pumic

Table 4. Continued.

Pitt River	Southwest	Lafarge Canada Inc.	Aggregate; Crushed rock; 092GSE007	Typically, >1 Mty	na	na	River access for barging.
Sechelt	Southwest	Lehigh Hanson Materials Limited	Sand and Gravel	Typically, 5-6 Mty	na	Several decades	Freighter loading facility.
Spumoni	Southwest	Northwest Landscape and Stone Supply Ltd.	Flagstone; Flagstone; 092GNW100	na	na	na	Seasonal quarry.
Sumas Shale	Southwest	Sumas Shale Ltd. (Lafarge Canada Inc., Clayburn Industrial Group)	Shale, clay, sandstone; Residual kaolin; 092GSE024	About 500,000 t annually	na	50+ years	Approximately 55% shale, 45% sandstone for cement production.
Texada Quarry	Southwest	Texada Quarrying Ltd. (Lafarge Canada Inc.)	Limestone, aggregate; Limestone; 092F 395	Typically, approx. 3.5 to 4.5 Mty	na	100+ years	Mostly produces limestone for cement manufacture. Freighter loading facility.

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

of massive white barite from their **Fireside** mine. The barite is crushed and bagged on site and trucked to Fort St. John and Alberta for use in the drilling industry. In the South Central Region, industrial mineral commodities produced include roofing granules (from basalt), limestone, dimension stone, opal, railway ballast, diatomaceous earth, and zeolite. The Southeast Region hosts several industrial mineral mines, the largest of which are in the Rocky Mountain foreland belt. Commodities produced include magnesite, silica, gypsum, mineral wool, and abrasives. In the Southwest Region several operations remained in steady production and continue to be a major employer. Products include landscaping stone, dimension stone, aggregate, sand and gravel, marble and limestone, and pumice.

4. Mine development projects

As used herein, the term 'mine development projects' refers to those where the decision to produce has been made, necessary permits have been acquired, financing has been secured, and on-site construction has started. In 2022, Artemis Gold Inc.'s Blackwater Gold project, Sinova Global's Horse Creek Silica project, CertainTeed Gypsum Canada Inc.'s Kootenay West project and Ascot Resources Ltd.'s Premier Gold project (Fig. 1; Table 5) were considered under development. The Blackwater Gold project is in the North Central Region. The Horse Creek and Kootenay West projects are in the Southeast Region and the Premier Gold project is in the Northwest Region.

4.1. Blackwater Gold (Artemis Gold Inc.)

Artemis Gold Inc. carried out clearing, bulk earthworks, and erosion control at their **Blackwater Gold** project. The first gold pour is planned for Q3 2024.

4.2. Horse Creek Silica (Sinova Global)

At the **Horse Creek** Silica project, Sinova Global operates a seasonal quarry in Mount Wilson Formation orthoquartzites (Middle to Upper Ordovician). In 2022, the company continued with permit updates, road construction, rail siding development, and mine site preparation. The mine is expected to produce up to 400,000 tpy of >99% SiO₂ with an estimated resource of 1.4 Mt.

4.3. Kootenay West (CertainTeed Gypsum Canada Inc.)

CertainTeed Gypsum continued development work on its **Kootenay West** mine. Most work was on improving road access to the mine site and environmental mitigation. Some pre-strip and pre-production extraction work was done as well. The mine reported a resource of 17 Mt gypsum at a blended quality of 83%, with annual production of 400,000 tpy. The deposit is in evaporites of the Burnais Formation (Devonian) in a section 20-25 m thick grading 75-95% gypsum. Mining operations are scheduled to begin in 2023 and the projected mine life is 43 years.

4.4. Premier Gold (Ascot Resources Ltd.)

In 2022, Ascot Resources Ltd. continued with construction

Table 5. Selected mine development projects.

Region	Operator (partner)	Commodity; Deposit type; MINFILE	Reserves	Resource	Comments
Northwest	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 A	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.
North Central	Artemis Gold Inc.	Au, Ag; Epithermal Au-Ag-Cu, intermediate sulphidation; 093F 037	P+Pr: 334.4 Mt 0.75 g/t Au, 5.8 g/t Ag at a 0.20 g/t AuEq cut off containing 8.0 Moz Au, 62.3 Moz Ag	M+I: 597 Mt (including reserves) 0.61 g/t Au, 6.4 g/t Ag at a 0.20 g/t AuEq cut off containing 11.7 Moz Au, 122.4 Moz Ag	The company has fulfilled environmental assessment conditions to start site preparation, which began in 2022. Reserves (August 2020) are reported at 8 million oz Au and 62.3 million oz Ag, with a life-of mine average annual gold production of 339,000 oz.
Southeast	Sinova Global	Silica; Silica sandstone; 082N 043	na	1.4 Mt est.	High purity silica >99.9% SiO ₂ , permit updates, road and rail construction, mine site preparation. Planned up to 400,000 tpy.
Southeast	CertainTeed Gypsum Inc.	Gypsum; Evaporitic bedded gypsum; 082JSW005, 20	na	North and South quarries: Total 17 Mt (blended quality of 83% gypsum)	Pre-stripping and Pre-production mining, mine road construction, environmental mitigation; planned 400,000 tpy; 43-year mine life.
	Northwest North Central	Northwest Ascot Resources Ltd. North Central Southeast Southeast Southeast CertainTeed	Northwest Ascot Resources Ltd. North Central Inc. Southeast Global Silica; Silica; Silica sandstone; 082N 043 Southeast Cypsum Inc. Southeast Cypsum Inc. Southeast Cypsum Inc. CertainTeed Gypsum; Evaporitic bedded gypsum; 082JSW005,	Northwest Resources Ltd. Northwest Resources Ltd. North Central Inc. Artemis Gold Inc. Artemis Gold Spithermal; 104B 054 Au-Ag; Epithermal; 19.1 g/t Ag Au-Ag; Epithermal 334.4 Mt 0.75 g/t Au, 10.75 g/t Au,	North North North Central North Central Southeast Certain Teed Gypsum inc. Certain Teed Gypsum inc.

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

and plant pre-commissioning is on schedule with a planned start up of Q4 2023 for their **Premier Gold** project, with a first gold pour expected in early 2024.

5. Selected proposed mine or quarry projects

Projects at the proposed mine or quarry (or mine evaluation) stage have a resource defined or largely defined and are preparing to submit a project description to initiate the environmental assessment process or are waiting on permit amendments. Projects that have permits in place but have yet to obtain financing to begin site construction are also considered to be at the proposed stage. Selected projects (Fig. 1; Table 6) discussed below are grouped by region and commodity types.

5.1. Northwest Region

Proposed metal mines include Blue Lagoon Resources Inc.'s **Dome Mountain Gold** project, Galore Creek Mining Corporation's **Galore Creek** project, Seabridge Gold Inc.'s **KSM** project, Kutcho Copper Corp.'s **Kutcho** project and Ascot Resources Ltd.'s **Red Mountain** project. Telkwa Coal Ltd., a subsidiary of Allegiance Coal Ltd., is proposing to develop the **Tenas** coal mine project.

5.1.1. Proposed metal mines

Blue Lagoon Resources Inc.'s **Dome Mountain Gold** project contains a Measured resource (January 2022) of 136,000 t grading 10.32 g/t Au and 57.31 g/t Ag, an Indicated resource of 662,000 t grading 8.15 g/t Au and 41.19 g/t Ag, and an Inferred resource of 85,000 t grading 6.02 g/t Au and 26.13 g/t Ag (with a cut and fill method at 3.5 g/t Au cut off). Blue Lagoon carried out 19,500 m of drilling in 65 holes including the new Chance structural zone. Highlights from the Chance zone include 0.41 m grading 126 g/t Au and 404 g/t Ag in a 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.

The **Galore Creek** Cu-Au project is operated by the Galore Creek Mining Corporation and is jointly owned by Teck Resources Limited and Newmont Corporation. 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 and 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.

Seabridge Gold Inc.'s **KSM** project consists of four porphyry Cu-Au deposits: Kerr, Sulphurets, Mitchell, 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.

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. 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.

Ascott Resources Ltd.'s **Red Mountain** project is a proposed underground mine 18 km east-northeast of Stewart. 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. A Feasibility Study was completed in 2020. **Red Mountain** is estimated to contain Measured and Indicated resources (April 2020) of 3.19 Mt grading 7.63 g/t Au and 21.02 g/t Ag and an additional 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). Environmental baseline monitoring continued, but minimal exploration work was done on the project as Ascot concentrated on development and construction at their **Premier Gold** project.

5.1.2. Proposed coal mines

Telkwa Coal Ltd., a subsidiary of Allegiance Coal Ltd., is proposing to develop the **Tenas** project, which is road accessible, approximately 17 km south of Smithers. Itochu Corp. has a 10% interest. The project entered the provincial environmental assessment process in 2018 and the project proposes to produce 775,000-825,000 t of steelmaking coal annually with a minelife of 22 years. In 2017, Allegiance Coal Ltd. released a reserve estimate of Proven plus Probable reserves of 62.9 Mt of coal. Currently there are four conceptual pits (from south to north:

Table 6. Selected proposed mine projects.

Mine	Region	Operator (partner)	Commodity; Deposit type; MINFILE	Reserves	Resource	Comments
Dome Mountain Gold	Northwest	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	Northwest	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	Northwest	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 m of geotechnical drilling.
Kutcho	Northwest	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.

Table 6. Continued.

Red Mountain	Northwest	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	Northwest	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 minelife of 22 years.
Hudette	Northeast	Conuma Resources Limited	Coal; Bituminous coal; 093O 060	P+Pr: 15.6 Mt	na	Prefeasibility study completed, EA application started. Continued baseline monitoring.
Sukunka	Northeast	Glencore Canada Corporation	Coal; Bituminous coal; 093P 014	na	145.0 Mt coal in situ	The Government of Canada determined the project would have significant adverse environmental effects and declined to approve the project.
Woverine (Herman Pit)	Northeast	Conuma Resources Limited	Coal; Bituminous coal; 093I 031	na	M+I: 24.36 Mt	For its Wolverine (Hermann Pit) project, Conuma continued to make progress with Environmental Management Act Permits Amendments.
Aley	North Central	Taseko Mines Limited	Nb; Carbonatite- hosted; 094B 027	P+Pr: 83.8 Mt 0.50% Nb ₂ O ₅ (at 0.30% Nb ₂ O ₅ cut off)	M+I: 285.8 Mt $0.37\% \text{ Nb}_2\text{O}_5$ (at $0.20\% \text{ Nb}_2\text{O}_5$ cut off)	Proposed open-pit mine with 10,000 tpd ore processing rate and average annual production of 9000 t Nb. Environmental monitoring and product marketing.
Giscome	North Central	Graymont Western Canada Inc.	CaCO ₃ ; Limestone; 093J 041, 25	na	I: >100 Mt of limestone (>95% calcium carbonate, <5% magnesium carbonate) in situ	Environmental assessment in place. Proposed 600,000 tpy limestone quarry to feed a vertical lime kiln producing 198,000 t of lime annually during a 50+ year mine life.

Table 6. Continued.

Central Mining Inc. (KGHM Polska Mied2 Polska Mied2 SA 80% 13 0.29% Cu, 0.18 g/t Au, 0.35 g/t Ag (2018). Proponents are investigating a possible resubmission.	Underground			Porphyry Cu±Mo±Au;	0.27% Cu, 0.54 g/t Au, 1.99 g/t Ag containing 629.6 Mlbs Cu, 1.87 Moz Au,	reserves) 0.182% Cu, 0.3 g/t Au, 1.55 g/t Ag containing 1195 Mlbs Cu, 3.33 Moz Au,	underground panel cave mine with 24,600 tpd ore processing rate and life-of-mine average annual production of 106,000 oz Au and 47 Mlbs Cu over a 12-
Central Corp. Corp. Corp. Possible Central Corp. Possible Central Corp. Possible Central Corp. Possible Central Central Corporation (Imperial Mountain Central	Ajax		Mining Inc. (KGHM Polska Miedź SA 80%, Abacus Mining and Exploration Corporation	Alkalic porphyry; 092INE012,	cut off US\$7.10/t): 426 Mt 0.29% Cu, 0.19 g/t Au,	US\$7.10/t): 568 Mt 0.26% Cu, 0.18 g/t Au,	certification denied by provincial (2017) and federal ministers (2018). Proponents are investigating a possible
Prosperity Central Limited Porphyry; cut off 0.14% Cu): 1010 Mt centificate (expired) but denied federal approval. Taseko and Tšilhqot'in Nation in discussions.	Cariboo Gold		Development	Au-quartz veins; 093H 140,	na	Inf: 14.4 Mt 3.5 g/t Au	•
Creek Central Corporation (Imperial Metals 100%) Spanish South Central Gold Ltd. Spanish South Central Coal Ltd. Spanish South Central Gold Ltd. Spanish South Spanish Au, Ag; P+Pr: 95.9 Mt O.76 g/t Au, O.76 g/t Au, O.70 g/t Ag O.71 g/t Ag O.71 g/t Ag O.73 g/t Au, O.76 g/t Ag O.73 g/t Au, O.76 g/t Ag O.74 g/t Ag O.75				Porphyry;	cut off \$5.50/t): 831 Mt 0.23% Cu, 0.41 g/t Au containing (recoverable) 3.6 Blb Cu,	0.14% Cu): 1010 Mt	environmental certificate (expired) but denied federal approval. Taseko and Tŝilhqot'in
Mountain Central Mountain Gold Ltd. Au-quartz veins; 0.71 g/t Ag 0.71 g/t Ag Inf: 18 Mt 0.63 g/t Au, 0.76 g/t Ag with a new project description. Feasibility work is continuing. Bingay Main Southeast Coal Ltd. Bituminous coal; 082JSE011 O.76 g/t Au, 0.72 g/t Ag Inf: 18 Mt 0.63 g/t Au, 0.76 g/t Ag Pre-application stages of EA; letter submitted in 2020 for project to remain in EA. Proposed 1 Mty operation with			Creek Mining Corporation (Imperial	Broken Hill- type;	na	4.0% Pb+Zn): 6.2 Mt 6.50% Zn, 1.33% Pb Inf: 6.678 Mt	assessment pre- application stage. Feb. 2013 resource before 2018-19 drilling. Imperial Metals now
Coal Ltd. Bituminous of EA; letter submitted coal; in 2020 for project to 082JSE011 remain in EA. Proposed 1 Mty operation with	_		Mountain	Au-quartz veins;	0.76 g/t Au,	0.50 g/t Au, 0.72 g/t Ag Inf: 18 Mt	environmental assessment process with a new project description. Feasibility
	Bingay Main	Southeast		Bituminous coal;	na	na	of EA; letter submitted in 2020 for project to remain in EA. Proposed 1 Mty operation with

Table 6. Continued.

Table 0. Contin	ucu.					
Black Crystal	Southeast	Eagle Graphite Inc.	Graphite; Crystalline flake graphite; 082FNW260, 283	na	Regolith + calcsilicate; M + I: 19.23 Mt 1.35% fixed carbon Inf: 23.92 Mt 1.3% fixed carbon (2018)	Active mine lease. No work reported for 2022.
Bull River	Southeast	Braveheart Resources Inc.	Cu, Au, Ag; Cu±Ag quartz veins; 082GNW002	na	I: 2.26 Mt 1.80% Cu, 0.42 g/t Au, 15.3 g/t Ag Inf: 1.36 Mt 1.60% Cu, 0.42 g/t Au, 13.6 g/t Ag	Further surface facilities refurbishment. Ground control plan provided to advance mine permit process.
Crown Mountain	Southeast	NWP Coal Canada Limited (Jameson Resources Limited 80%, Bathurst Resources Limited 20%)	HCC and PCI; Bituminous coal; 082GNE018	HCC: P: 42.60 Mt Pr: 4.91 Mt PCI: P: 7.13 Mt Pr: 1.19 Mt (2014)	HCC + PCI: M: 68.9 Mt I: 6.0 Mt (2014)	Pre-Application EA stage, 2021 extended FN consultation to 2022. Proposed 2 Mtpy operation (86% HCC and 14% PCI) with 15-year mine life.
Michel Coal	Southeast	North Coal Limited	HCC and PCI; Bituminous coal; 082GSE050	na	HCC: M: 44.6 Mt I: 42.5 Mt open-pit and underground (2015)	Entered pre-application of EA in 2015; received AIR requirements in September 2020.
Record Ridge	Southeast	West High Yield (W.H.Y.) Resources Ltd.	Mg; Alaskan-type Pt±Os±Rh±Ir; 082FSW398	na	M: 28.4 Mt 24.82% Mg I: 14.6 Mt 24.12% Mg Inf: 1.07 Mt 24.37% Mg	35 m drill hole, pre- feasibility study.
Black Bear and Orca	Southwest	Polaris Materials Corporation (Vulcan Materials Company and and 'Namgis First Nation)	Aggregate; Crushed rock	na	20 years (proposed life)	Orca environmental certificate amendment application withdrawn. Proposed 250,000 tpy near the Orca quarry revised to 3-4 Mtpy. Indicate intention to reapply under 2018 Act.
BURNCO Aggregate	Southwest	BURNCO Rock Products Ltd.	Aggregate; Sand and Gravel	na	Approx. 20 Mt	Has environmental certification, would require Mines Act and other permits.

Table 6. Continued.

Sechelt Carbonate	Southwest	Ballinteer Management Inc.	Limestone, dolostone, aggregate; Limestone, dolomite, crushed rock; 093GNW031	na	Carbonate rock: 76.1 Mt Gabbro: >700 Mt	Proponent requests project remain in environmental assessment preapplication stage.
			093GIN W 031			

HCC = hard coking coal; PCI = pulverized coal injection; TC = thermal coal P = Proven; Pr = Probable; M = Measured; I = Indicated; Inf = Inferred

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.

5.2. Northeast Region

Three proposed coal mine projects are in the Northeast Region: Conuma Resources Limited's **Hudette** and **Wolverine** (**Hermann Pit**) projects and Glencore ple's **Sukunka** project.

5.2.1. Proposed coal mines

Conuma Resources Limited completed a prefeasibility study and started working on their environmental assessment application for their **Hudette** project. For its **Wolverine** (**Hermann Pit**) project, Conuma continued to make progress with Environmental Management Act Permits Amendments. This will be a new pit operation using current Wolverine mine infrastructure. Glencore Canada Corporation and JX Nippon Oil and Energy Corporation's **Sukunka** project has been planned as both an open-pit and underground operation. The British Columbia Environmental Assessment Office completed its assessment of Glencore's application and provided its assessment to the Impact Assessment Agency of Canada. The Government of Canada determined the project would have significant adverse environmental effects that could not be mitigated and declined to approve the project.

5.3. North Central Region

There are three proposed mines in the North Central Region. Two are proposed metal mines: Taseko Mines Limited's **Aley** Niobium project; and Centerra Gold Inc.'s Cu-Au-Ag **Kemess Underground** project. Graymont Western Canada Inc.'s **Giscome** project is a proposed industrial mineral mine (limestone).

5.3.1. Proposed metal mines

Taseko Mines Limited's **Aley** niobium-bearing carbonatite project is near the western extremity of platformal strata. The carbonatite intrusion is oval in map view, measuring about 2.0 by 2.8 km. Reserves are calculated at 84 Mt grading 0.5% Nb₂O₅. The proposed processing plant would have a

nominal capacity of 10,000 tpd. Single-stage crushing followed by three stages of grinding and a multi-stage flotation process would produce a $\mathrm{Nb_2O_5}$ concentrate. The concentrate would then be processed in an on-site converter to produce FeNb as a saleable product. Expected process recovery is 63% with annual production averaging 9 million kg of niobium over the mine life. Environmental monitoring and product marketing initiatives continue. A converter pilot test to support the design of the commercial facilities is ongoing. Environmental monitoring and product marketing initiatives continue. A converter pilot test to support the design of the commercial facilities is ongoing.

Centerra Gold Inc.'s Kemess Underground (KUG) project is estimated to contain an Indicated resource of of 173.7 Mt grading 0.182% Cu, 0.3 g/t Au, and 1.55 g/t Ag. Within this resource are Probable reserves of 107.4 Mt grading 0.27% Cu, 0.54 g/t Au, and 1.99 g/t Ag. The former Kemess South mine closed in 2011. However, infrastructure remains in place, and both the camp and ore processing plant will be used to service **KUG**, which is about 6.5 km north of the former processing plant. KUG is considered a stand-alone operation, to be mined by panel caving, with crushed ore conveyed underground to the processing plant. Processing rate would be 24,600 tpd with a life of mine average production of 106,000 oz Au and 47 Mlbs Cu over a 12-year mine life. **Kemess East** (KE), about 1 km east of KUG, is an underground operation that could be integrated into the KUG project and use facilities developed for **KUG**. **KE** has an Indicated resource of 177.5 Mt grading 0.36% Cu, 0.4 g/t Au, and 1.97 g/t Ag and an Inferred resource of 29.3 Mt grading 0.314% Cu, 0.3 g/t Au, and 2.00 g/t Ag. The KUG project has approval for development, but Centerra has not declared a timeline.

5.3.2. Proposed industrial mineral mines or quarries

At their **Giscome** project, Graymont Western Canada proposes to mine high-purity limestone in basaltic rocks of the Antler Formation (Triassic; Slide Mountain Group). Crushed stone would be transported about 5 km by truck to lime kilns at a former stone quarry, owned and operated by CN Rail, in the community of Giscome. An existing CN Rail line would be used for transporting the product. The project has Environmental Assessment approval. Due to weak markets for lime in the region, Graymont has not yet decided to initiate construction.

5.4. South Central Region

Proposed mine projects in the South Central Region include KGHM Ajax Mining Inc.'s **Ajax**, Osisko Development Corp.'s **Cariboo Gold**, Taseko Mines Limited's **New Prosperity**, Ruddock Creek Mining Corporation's **Ruddock Creek** and Spanish Mountain Gold Ltd.'s **Spanish Mountain** projects. All are metal mine projects.

5.4.1. Proposed metal mines

The Ajax porphyry copper-gold project, owned by KGHM Ajax Mining Inc., is an 80:20 joint venture between KGHM Polska Miedź S.A. and Abacus Mining and Exploration Corporation. A revised feasibility study released in 2016 modelled Ajax as a 65,000 tpd open-pit mine with a projected 18-year life. In December 2017, the project was denied certification by the British Columbia Ministries of Environment and Climate Change Strategy and Energy, Mines and Petroleum Resources. In June 2018, Natural Resources Canada, Fisheries and Oceans Canada, and the Canadian Coast Guard denied federal certification. Although KGHM Ajax has not announced plans for the site, Abacus issued an update stating that the project remains a priority and that KGHM is continuing to engage with First Nations.

Osisko Development Corp. acquired the Cariboo Gold project in 2019 through a purchase of Barkerville Gold Mines. The property consolidates several historic gold mines. The company engaged in the British Columbia environmental assessment process in 2019, and the application is now in the development and review phase with an updated project description. A 2022 Preliminary Economic Assessment incorporates an updated underground resource and changing costs. The study models an initial 2000 tpd mine expanding to 8000 tpd. It would have a 12 year life with average annual production of 236,000 oz Au. Measured and Indicated resources are 27.102 Mt grading 4.0 g/t Au. Initial capital costs are estimated at \$121.5 million and the expansion at \$716.1 million. On January 3, 2023, a positive feasibility study was announced for the project. Results included a \$502 million after-tax net present value at a 5% discount rate and a 20.7% after-tax internal rate of return. The project would have 163,695 oz of annual gold production over a 12-year mine life.

Taseko Mines Limited's **New Prosperity** project was denied a 12-month extension of its provincial environmental certificate for a 70,000 tpd open pit copper-gold mine. New Prosperity received provincial certification in 2010, but in 2014 the Government of Canada refused to authorize the project. Taseko has a standstill agreement with the Tŝilhqot'in Nation pending a dialogue between the parties to arrive at a long-term resolution of differences about the project.

Imperial Metals Corporation has been 100% owner of the **Ruddock Creek** project since 2021 when it purchased the interests held by Japanese partners in Ruddock Creek Mining Corporation. The project remains in the pre-application phase of the British Columbia Environmental Assessment process.

A 2014 revised project description referred to a 3000 tpd underground lead-zinc mine with an 8-year life. A mineral resource estimate, released in February 2013, reported 6.246 Mt grading 6.5% Zn and 1.33% Pb (Indicated) and 6.678 Mt grading 6.33% Zn and 1.20% Pb (Inferred), using a 4.0% combined Pb+Zn cut off. This estimate does not incorporate 2018-19 drilling.

5.5. Southeast Region

The Southeast Region has two proposed metal mines (Bull River, Record Ridge), three proposed coal mines, (Bingay Main, Crown Mountain, Michel Coal), and one proposed graphite mine, Black Crystal (Fig. 1; Table 6).

5.5.1. Proposed metal mines

Braveheart Resources Inc. is continuing development of its **Bull River** mine project. Work included further refurbishment of all surface facilities. The company completed a ground management plan to advance the mine permit process. The mine permit and environmental permit process ongoing. The mineral resource is reported (December 2021) as Indicated at 2,261,000 t with 2.13% Cu and 0.44 g/t Au, and Inferred at 1,356,000 t with 1.60% Cu and 0.42 g/t Au.

West High Yield Resources Ltd.'s **Record Ridge** magnesium project is in a variably serpentinized and locally carbonatized ultramafic cumulate body. Reported mineral resources as of 2013 include 28.4 Mt at 24.82% Mg Measured, 14.6 Mt at 24.21% Mg Indicated, and 1.07 Mt at 24.37% Mg Inferred. The company amended its ongoing application for a Mines Act permit and completed a pre-feasibility study for the project.

5.5.2. Proposed coal mines

The **Bingay Main** project proposed by Centerpoint Resources Inc. remains in the Pre-Application process at the Environmental Review Office. The company has proposed a mine with a production capacity of 1 Mt per year and a mine life of 12 to 14 years.

The **Crown Mountain** mine proposed by NWP Coal Canada Ltd. (Jameson Resources Limited (80%), Bathurst Resources Limited (20%)) is in the Pre-Application process. The company was granted an extension to the expiry of the Application Information Requirements (AIR) for the project from October 26, 2021 to April 26, 2022 to accommodate First Nations concerns. The company has proposed a mine with production capacity for 3.7 Mtpy and a mine life of 16 years.

The **Michel Coal** project proposed by North Coal Ltd. a wholly owned subsidiary of CoalMont Pty Ltd., is in the Pre-Application process at the Environmental Review Office. The company has proposed a mine with production capacity of 2.3-4 Mt per year and a mine life of 30 years. In December, the Tobacco Plains Indian Band, Pacific Road Capital and North Coal Limited signed a letter of intent centred around the principles of co-ownership, co-management, and co-governance for the project.

5.5.3. Proposed graphite mine

Eagle Graphite Inc.'s **Black Crystal** project has an active mining lease. No work was reported for the site in 2022.

5.6. Southwest Region

The Southwest Region has no proposed major metal mine or coal mine projects. Proposed industrial mineral mines or quarries and aggregate quarries include the **Black Bear** aggregate project near Port McNeill, the **BURNCO Aggregate** project, and the **Sechelt Carbonate** project.

5.6.1. Proposed quarries

Polaris Materials Corporation included the **Black Bear** project near its Orca sand and gravel quarry in an Environmental Certificate amendment for Orca. If the project proceeds, it will be a source of up to 3-4 Mtpy of crushed basalt, an increase over the 250,000 tpy proposed in a 2017 project description. Mine life would be extended from 10 to 20 years. This application was withdrawn with a request by the proponent to re-apply under the 2018 Environmental Assessment Act.

The **BURNCO Aggregate** project in the McNab Creek Valley received environmental certification in 2018 and may proceed with British Columbia Mines Act and other permitting. Certifications are valid for 5 years. Fisheries and Oceans Canada concluded that the project is unlikely to cause significant environmental harm. The proposed sand and gravel mine would ramp up to a 1.6 Mtpy operation, initially barging product to BURNCO Rock Products Ltd.'s ready-mix concrete plants in South Burnaby and Port Kells. BURNCO submitted revisions to the project in 2014, changing production rate, relocating some facilities, and specifying a mine life of 16 years.

Ballinteer Management Inc. now holds the property comprising the **Sechelt Carbonate** project. They filed engineering, archeological, and baseline environmental studies for assessment in 2016; activity was not reported for 2017-2022. The property contains resources of calcite- and dolomite-bearing carbonate rock and gabbroic rock for potential use as aggregate. The original proposal was for a 4-6 tpy carbonate quarry producing both limestone and dolostone. Product was to be shipped from a barge load out on Sechelt Inlet.

6. Exploration expenditures

In 2022, exploration expenditures, drilling estimates, and other metrics for British Columbia were captured in the British Columbia Mineral and Coal Exploration Survey. The survey is a joint initiative between the Province of British Columbia Ministry of Energy, Mines and Low Carbon Innovation, the Association for Mineral Exploration, and EY LLP. A full report will be available in March. The new survey does not capture exploration expenditures for aggregates.

Total metal, industrial mineral, and coal exploration expenditures are estimated at \$740.4 million for 2022, up \$80.6 million from the 2021 survey total of \$659.8 million. Of this, \$12.5 million was from coal projects and \$727.9 million

was from metal and other projects (Fig. 5). This is the largest recorded expenditure for metal and other projects and the largest overall expenditure.

Exploration expenditures by region (Fig. 6) can be further divided into five categories: grassroots, early stage, advanced stage, mine evaluation, and mine lease (Figs. 7, 8). The provincial combined total for grassroots and early-stage exploration in the 2022 survey is 38.5%, up from the 2021 total of 24.4%. The total reported drilling for the province was 1,149,550 m down 292,750 m from the 2021 total of 1,442,300 m (see Fig. 9 for regional breakdown).

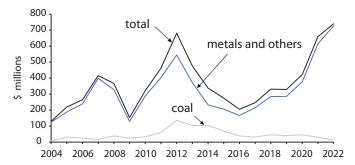


Fig. 5. Exploration expenditures per year, by type.

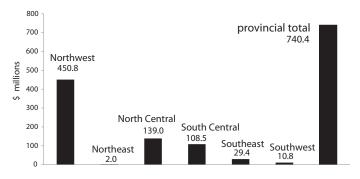


Fig. 6. 2022 exploration expenditures by region.

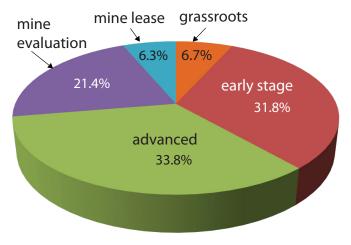
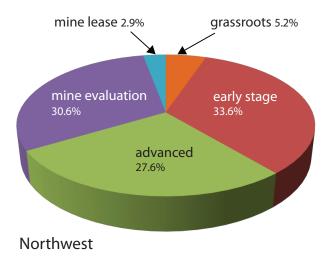
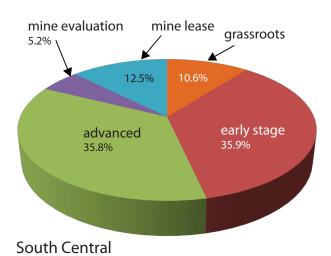
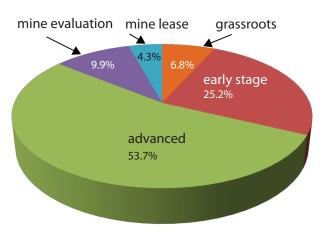
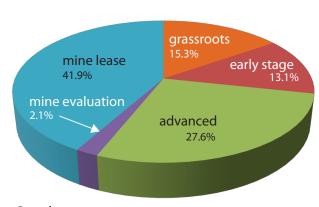


Fig. 7. 2022 exploration expenditures by category.



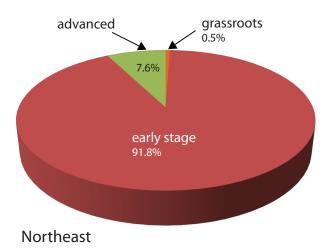






North Central





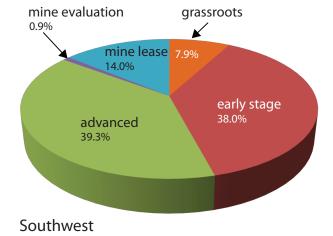


Fig. 8. 2022 exploration expenditures by category for regions.

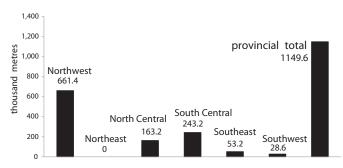


Fig. 9. 2022 exploration drilling by region.

7. Exploration land tenure

Acquisition of new mineral claims in 2022 was down compared to 2021 (Fig. 10). The total for 2022 was 2,301,115 hectares vs. 4,006,440 hectares for the previous year. New coal licenses issued in 2022 totalled 9218 hectares, up from the 2021 total of 3462 hectares (Fig. 11).

8. Selected exploration project highlights

There was a significant increase of \$80.6 million in expenditures in 2022 compared to 2021. The total of \$740.4 million is a provincial record. Explorationists continued to discover, define, and expand porphyry and porphyry-related copper-gold and copper-molybdenum deposits, gold deposits of various types, and stratiform base-metal, REE, industrial

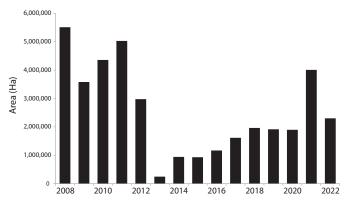


Fig. 10. New mineral claims by year.

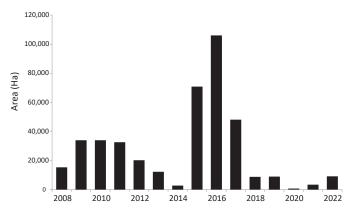


Fig. 11. New coal license issuances by year.

minerals, and coal deposits. Expenditures benefitted early in the year from availability of venture capital spurred by increases in the price of gold, copper, and other commodities in 2021. Data from the British Columbia Mineral and Coal Exploration Survey show an increase in grassroots and early-stage projects (combined). Below, selected exploration projects (Fig. 1; Table 7) are grouped by project type and region; the individual regional sections of this volume provide further details.

8.1. Selected precious metal projects

8.1.1. Northwest Region

Pacific Bay Minerals Ltd. 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.

At Trailbreaker Resources Ltd.'s **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.

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, in a 12.2 m interval grading 2.43 g/t Au. Work also included an airborne ZTEM geophysical survey.

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.

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 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.

Hanstone Gold Corp.'s **DOC** project is underlain by deformed and metamorphosed Upper Triassic volcanic rocks of

 Table 7. Selected exploration projects.

Region	Operator	Commoditu	December (NII 42 101	C
	(partner)	Commodity; Deposit type; MINFILE	Resource (NI 43-101 compliant unless indicated otherwise)	Comments
Northwest	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.
Northwest	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.
Northwest	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.
Northwest	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.
Northwest	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.
Northwest	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.
Northwest	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.
Northwest	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.
	Northwest Northwest Northwest Northwest	Northwest Pacific Bay Minerals Ltd. Northwest Trailbreaker Resources Ltd. Northwest P2 Gold Inc. Northwest Surge Copper Corp. Northwest Libero Copper & Gold Corp. Northwest Core Assets Corporation Northwest Sun Summit Minerals	Northwest Pacific Bay Minerals Ltd. Precious metal veins; 104N 043 Northwest Trailbreaker Resources Ltd. Polymetallic veins; 104O 007 Northwest P2 Gold Inc. Cu, Au; Epithermal Au-Ag-Cu Northwest P2 Gold Inc. Au; Epithermal Au-Ag-Cu Northwest Surge Copper Cu, Mo, Ag; Porphyry Cu±Mo±Au; 093E 046 Northwest Corp. Alkalic porphyry; 104G 208 Northwest Core Assets Corporation Ag, Pb, Zn, Cu; Skarn carbonate replacement; 104M 022 Northwest Sun Summit Minerals Corp. Polymetallic veins; Polymetallic veins;	Northwest Pacific Bay Minerals Ltd. Northwest Trailbreaker Resources Ltd. Northwest P2 Gold Inc. Northwest P2 Gold Inc. Northwest P2 Gold Inc. Northwest P2 Gold Inc. Northwest P3 Gold Inc. Northwest P4 Gold Inc. Northwest Surge Copper Corp. Northwest Corp. Northwest Corp. Northwest Libero Copper & Gu, Mo, Ag; Polymetallic veins; 1040 007 Northwest Libero Copper & Gu, Mo, Ag; Porphyry Cu±Mo±Au; 093E 046 Northwest Corporation Skarn carbonate replacement; 104M 022 Northwest Sun Summit Minerals Corp. Northwest Corp. Northwest Sun Summit Northwest Packed Sun Summit Corp. Northwest Pacific Bay Au; Au; Ag, Zn, Pb, Cu; Northwest Packed Skarn carbonate replacement; 104M 022 Northwest Pacific Bay Au; Alkalic porphyry; 104G 208 Northwest Pacific Bay Au; Au; Ag, Zn, Pb, Cu; Polymetallic veins; Polymetallic veins;

 Table 7. Continued.

Table 7. Conti	mucu.				
Cassiar Gold	Northwest	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.
DOC	Northwest	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	Northwest	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.
E&L	Northwest	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.
Eskay- Corey	Northwest	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.
Eskay Creek	Northwest	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	Northwest	Sassy Gold Corp.	Au, Ag, Pb, Cu; Polymetallic veins	na	3740 m DDH drilling (18 holes) at the Westmore Discovery zone.

 Table 7. Continued.

Golddigger	Northwest	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.
Iskut	Northwest	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)	Northwest	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.
Kitsault Valley (Homestake Ridge)	Northwest	Dolly Varden Silver Corporation	Au, Ag, Pb, Zn; Polymetallic veins, Marine volcanic association Cu, Pb, Zn, Au, Ag; 103P 188	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.
Midas	Northwest	Juggernaut Exploration Ltd.	Au, Ag, Cu, Zn; Skarn; 1031 131	na	Rock sampling, prospecting, and geological mapping. A 1 m chip sample with 117 g/t Au, 132 g/t Ag, 1.585% Cu, 1.77% Zn.
NAK	Northwest	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.
New Polaris	Northwest	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.

 Table 7. Continued.

Newmont Lake	Northwest	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	Northwest	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	Northwest	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	Northwest	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.
Porter	Northwest	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.

 Table 7. Continued.

Table 7. Conti	naca.				
Ranch	Northwest	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.
Ruby Creek	Northwest	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	Northwest	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.
Scottie Gold Mine	Northwest	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	Northwest	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, 14.6 g/t Ag, and 0.14 g/t Au.
Silver Queen	Northwest	Equity Metals Corporation	Ag, Pb, Zn, Au; Transitional porphyry epithermal; 093L 002I	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.

 Table 7. Continued.

Silvertip	Northwest	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.
Snip Gold	Northwest	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 Prefeasibility 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.
Thorn (Camp Creek)	Northwest	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)	Northwest	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	Northwest	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.
Turnagain	Northwest	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 7. Continued.

Table 7. Conti	naca.				
Williams	Northwest	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.
Muskwa	Northeast	Fabled Copper Corp.	Cu, Ag, Pb, Co; Cu ±Ag quartz veins; 094K 012, 50	na	Applied for five-year land use permit for drilling.
3Ts	North Central	Independence Gold Corp.	Au, Ag; Epithermal Au-Ag: low sulphidation; 093F 055	2022 estimate. Tommy and Ted-Mint veins Inf: 4.47 Mt 3.64 g/t Au, 96.26 g/t Ag (at a cut off grade of 0.4 g/t AuEq in-pit, 2.01 g/t AuEq underground)	Drilling, 17 DDH (4185 m) at Ted-Mint, Tommy and Balrog. Highlight results included 30.0 m grading 4.99 g/t Au, 53.3 g/t Ag.
Decar Nickel District	North Central	FPX Nickel Corp.	Ni, Fe; Podiform chromite; 093K 116	2022 resource estimate Baptiste deposit I: 1815 Mt 0.129% DTR Ni, 0.211% Total Ni, 0.0035% DTR Co, 2.40% DTR Fe Inf: 339 Mt 0.131% DTR Ni, 0.212% Total Ni, 0.0037% DTR Co, 2.55% DTR Fe	2504 m drilling (10 holes) at Van target. Ni in all holes; assays included 346.3 m grading 0.133% DTR Ni and 334.5 m grading 0.12% DTR Ni. Drilling expanded mineralization 1 km along strike; area of mineralization 2 km along strike and 1 km across. Mineralization is open laterally and at depth.
East Niv	North Central	NorthWest Copper Corp.	Cu, Au; Alkalic porphyry Cu-Au	na	Drilling, 8 DDH, 4390 m. 31.1 line-km of ground IP, 1260 line-km of airborne magnetics, 206 surface rock samples, 745 soil samples. Highlight rock sample results included 11 samples grading from 1.08 to 6.55% Cu with Ag grades between 3.7 and 262.0 g/t.
Indy	North Central	InZinc Mining Ltd.	Zn, Pb, Ag; Sedimentary exhalative Zn- Pb-Ag; 093H 072	na	Drilling, 17 DDH (2616 m), 1100 line-km airborne geophysics. Highlight results included 3.0 m grading 2.8% Zn, 0.6% Pb, and 3.8 g/t Ag and 3.6 m grading 3.5% Zn, 0.6% Pb, and 6.4 g/t Ag.
Jean Marie	North Central	Pacific Empire Minerals Corp.	Cu, Au, Ag, Mo; Porphyry Cu±Mo±Au; 093N 079	na	Drilling, 2 DDH (700 m). Results included: 155 m grading 0.18% Cu, 19 ppm Mo, and 1.0 g/t Ag, and 282 m interval grading 0.21% Cu, 27 ppm Mo, and 1.3 g/t Ag including 76 m grading 0.45% Cu, 71 ppm Mo, and 3.0 g/t Ag.
Joy	North Central	Amarc Resources Ltd.	Cu, Au; Porphyry Cu±Mo±Au; 094E 016, 57	Pine deposit I: historic non NI 43- 101 compliant: 40 Mt 0.15% Cu, 0.57 g/t Au (Stealth Mining Corporation 1997)	Drilling, 37 DDH (15,427 m) at the Pine deposit and at several district porphyry copper-gold deposit targets. 2648 soil and 313 surface rock sampling.

 Table 7. Continued.

Table 7. Conti	iiucu.				
Kliyul	North Central	Pacific Ridge Exploration Ltd.	Cu, Au, Ag; Alkalic porphyry Cu- Au; 094D 023	I: historic non NI 43- 101 compliant: 2.3 Mt 1.30 g/t Au, 0.45% Cu, 6.9 g/t Ag	12 DDH (7015 m). Highlight results included 588.0 m grading 0.12% Cu, 0.39 g/t Au, 0.90 g/t Ag, and 527.8 m grading 0.19% Cu, 0.30 g/t Au, 1.35 g/t Ag.
Kwanika	North Central	NorthWest Copper Corp.	Cu, Au, Ag; Alkalic porphyry Cu- Au; 093N 073	Central zone pit M+I: 104.6 Mt 0.23% Cu, 0.21 g/t Au, 0.78 g/t Ag (at a cut off grade of 0.13% CuEq) Central zone underground M+I: 118.9 Mt 0.30% Cu, 0.29 g/t Au, 0.96 g/t Ag (at a confining shape basis of 0.27% CuEq) South zone pit Inf: 33.3 Mt 0.26% Cu, 0.08 g/t Au, 1.64 g/t Ag, 0.01% Mo	Drilling, 29 DDH (11,871.80 m). Highlights included 304.20 m grading 0.47% Cu, 0.53 g/t Au, 1.7 g/t Ag, and 364.20 m grading 0.17% Cu, 0.17 g/t Au, 0.8 g/t Ag.
Lawyers	North Central	Benchmark Metals Inc.	Au, Ag; Epithermal Au-Ag: low sulphidation; 094E 066	Open pit M: 20.3 Mt 2.21 g/t Au, 30.5 g/t Ag I: 45.5 Mt 1.09 g/t Au, 18.2 g/t Ag Inf: 2.3 Mt 0.91 g/t Au, 12.8 g/t Ag Out of Pit I: 1.6 Mt 2.74 g/t Au, 60.6 g/t Ag Inf: 2.6 Mt 3.32 g/t Au, 56.3 g/t Ag	Drilling, 20,276 m. PEA and updated mineral resource assessment. The PEA results included a pre-tax NPV 5% of \$939 million, with IRR of 31.4%, and 2-year payback.
Lorraine	North Central	NorthWest Copper Corp.	Cu, Au, Ag; Alkalic porphyry Cu- Au; 093N 002, 094C 069, 174	Lorraine I: 12.95 Mt 0.55% Cu, 0.16 g/t Au Inf: 45.45 Mt 0.43% Cu, 0.1 g/t Au	Drilling, 7 DDH (2867 m). Filed an updated NI 43-101 mineral resource estimate.
Mount Milligan (Brownfield)	North Central	Centerra Gold Inc.	Cu, Au, Ag; Alkalic porphyry Cu- Au; 093N 194	na	Drilling, 54 DDH (28,266 m).
Mount Milligan (Greenfield)	North Central	Centerra Gold Inc.	Cu, Au, Ag; Alkalic porphyry Cu- Au; 093N 194	na	Drilling, 2 DDH (804 m).

 Table 7. Continued.

North Central	Kestrel Gold Inc.	Au, Cu; Au-quartz veins; 093N 200	na	Drilling, 14 RCD (1272 m). Highlight results included 2.33 g/t Au along 44.19 m and 2.39 g/t Au along 21.33 m.
North Central	Golden Cariboo Resources Ltd.	Au, Ag; Quartz ±carbonate veins in greenstone and sedimentary rocks; 093G 015	na	Drilling, 2 DDH (733.9 m). Highlight results included 0.6 m grading 17.5 g/t Au, 61.5 g/t Ag and 0.5 m grading 1.94 g/t Au.
North Central	Pacific Ridge Exploration Ltd.	Cu, Au, Ag; Alkalic porphyry Cu- Au; 094D 065	na	Drilling, 6 DDH (1861 m). Highlight results included 497.2 m of 0.37% Cu, 0.40 g/t Au, 1.6 g/t Ag, and 107.2 m of 0.63% Cu, 1.10 g/t Au, 2.91 g/t Ag.
North Central	TDG Gold Corp.	Au, Ag; Epithermal Au-Ag: low sulphidation; 094E 050, 26	Inf: 22.0 Mt 0.79 g/t Au, 26.7 g/t Ag	5034 m of oriented HQ diamond drilling (21 holes). Filed a NI 43-101 Mineral Resource. Reported results for late 2021 drilling included 34 m grading 7.19 g/t Au, 105 g/t Ag.
North Central	NorthWest Copper Corp.	Cu, Au, Ag, Zn; Cu skarn; 093N 009	Canyon Creek I:1.96 Mt 1.31% Cu, 1.44 g/t Au, 27.1 g/t Ag Inf: 5.84 Mt 0.86% Cu, 1.17 g/t Au, 20.0 g/t Ag	Drilling, 10 DDH (6698 m). Highlight results of 44.20 m grading 0.84% Cu, 0.51 g/t Au, 13.7 g/t Ag, and 75.95 m grading 0.55% Cu, 0.50 g/t Au, 10.9 g/t Ag.
North Central	Surge Battery Metals Inc. 80%, Nickel Rock Resources 20%	Ni, Fe; Podiform chromite	na	Geological mapping and sampling (600 soil, 190 rock); 300 m DDH drilling completed by early November.
North Central	Metals Inc. 80%, Nickel Rock Resources 20%	Ni, Fe; Podiform chromite; 093N 035	na	Geological mapping and sampling (304 rock).
North Central	Defense Metals Corp.	Nb, REE; Carbonatite- hosted deposits; 093J 014	I: 5.0 Mt 2.95% TREO Inf: 29.5 Mt 1.83% TREO Resources at a cut off grade 0.5% TREO Total metal % = sum of Ce+La+Nd+Pr+Sm+Nb	Drilling, 18 DDH (4357 m) and 1153 m geotechnical 2022 drilling. Results included 124 m grading 3.58% total rare earth oxides (TREO).
			percentages	
	North Central North Central North Central North Central	North Central Golden Cariboo Resources Ltd. North Central Pacific Ridge Exploration Ltd. North Central TDG Gold Corp. North Central NorthWest Copper Corp. North Central Surge Battery Metals Inc. 80%, Nickel Rock Resources 20% North Central Surge Battery Metals Inc. 80%, Nickel Rock Resources 20% North Central Defense	North Central North Central Surge Battery Metals Inc. 80%, Nickel Rock Resources 20% North Central Surge Battery Metals Inc. 80%, Nickel Rock Resources 20% North Central North Central Defense Metals Corp. North Central Defense Metals Corp. North Central Defense Metals Corp. Au, Ag; Cu, Au, Ag; Alkalic porphyry Cu-Au; 094D 065 Au, Ag; Epithermal Au-Ag; low sulphidation; 094E 050, 26 Cu, Au, Ag, Zn; Cu skarn; 093N 009	North Central Cariboo Resources Ltd. Cariboo Resources Ltd. Exploration Ltd. Corp. Cu, Au, Ag; (093N 200

 Table 7. Continued.

Bralorne	South Central	Talisker Resources Ltd.	Au; Au-quartz veins; 092JNE001	M+I: 260,000 tons 0.351 oz/ton Au Inf. 317,000 tons 0.231 oz/ton Au	Multi-year drilling campaign continued. New resource estimate in preparation.	
Chu Chua	South Central	Newport Exploration Ltd.	Cu, Zn, Ag, Au; Cyprus massive sulphide; 092P 140	Inf: 2.29 Mt 2.11% Cu, 0.30% Zn, 9.99 g/t Ag, 0.50 g/t Au	2022 updated resource estimate.	
Eldorado	South Central	Gelum Resources Ltd.	Au, Cu; Polymetallic veins, Au-quartz veins; 092O 026, 092JNE105, 95, 4	na	Magnetic and VTEM survey (890 line km). Drilling 3 holes, 800 m.	
Elizabeth (Elizabeth- Blackdome)	South Central	Tempus Resources Ltd.	Au, Ag; Au-quartz veins, Epithermal Au-Ag-Cu low sulphidation; 092O 053, 12	Inf: 522,843 t 12.26 g/t Au	Drilling 40 holes, 9760 m. Initial highlight 2.11 m grading 87.0 g/t Au.	
FG Gold and Gold Creek	South Central	Karus Gold Corp.	Au, Ag; Au-quartz veins; 093A 061	M: 5,600,000 t 0.812 g/t Au I: 9,570,000 t 0.755 g/t Au Inf: 27,493,000 t 0.718 g/t Au	Announced 2021 results. Highlights included 59.35 m grading 1.13 g/t Au including 17.87 m grading 2.23 g/t Au at FG Gold and 80.65 m grading 0.5 g/t Au including 46.4 m grading 0.74 g/t Au at Gold Creek. Filed technical report. 2015 resource estimate considered historical by Karus.	
Fox Tungsten	South Central	Happy Creek Minerals Ltd.	W; W skarns; 093A 259, 260, 261, 211	I: 582,000 t 0.826% WO ₃ Inf: 565,400 t 1.231% WO ₃	Released 2021 drill results. Highlights included 6.7 m grading 0.43% WO ₃ with 1.2 m grading 1.83% WO ₃ in the Nightcrawler zone. Some 2022 surface work.	
Gold Bridge	South Central	Blackstone Minerals Ltd.	Cu, Ni, Co, Au; 5 element veins?; 092JNE068, 108	na	Reported results of 2021 drilling. Highlights included 81 m grading 0.21% Ni at the Western Gem prospect and 0.9 m grading 1.45% Cu, 0.56% Ni, and 0.19% Co at the Jewel prospect. Reconnaissance prospecting and geophysical modelling.	
Goldrange	South Central	Kingfisher Metals Corp.	Au, Ag; Au and Cu±Ag quartz veins; 092N 058, 59, 47, 57, 48	na	Rotary air blast and diamond drilling (10,000 m). Initial results include 40 m grading 2.86 g/t Au.	

 Table 7. Continued.

Lac La Hache	South Central	Engold Mines Ltd.	Cu, Au, Ag, Fe; Alkalic porphyry Cu- Au, Cu skarn; 092P 120, 108, 2, 153	Aurizon Inf: 1.99 Mt 2.32 g/t Au, 0.6% Cu, 5.37 g/t Ag Spout zone open pit I: 6.5 Mt 0.33% Cu, 1.34 g/t Ag, 0.05 g/t Au, 11.62% magnetite Spout zone open pit Inf: 7.66 Mt 0.27% Cu, 0.99 g/t Ag, 0.04 g/t Au, 9.5% magnetite Spout zone underground Inf: 0.39 Mt 1.0% Cu, 2.58 g/t Ag, 0.13 g/t Ag, 10.33% magnetite G1 underground Inf: 1.71 Mt 1.25% Cu, 6.45 g/t Ag, 0.19 g/t Au, 30.94% magnetite	Drilling (more than 3100 m) at Au (Aurizon) and Ann North Cu-Au porphyry targets.
Miner Mountain	South Central	Sego Resources Inc.	Cu, Au; Alkalic porphyry Cu- Au; 092HSE203, 78	na	7 holes, 1582 m. Highlight assay 80 m grading 0.95 g/t Au.
MPD	South Central	Kodiak Copper Corp.	Cu, Au; Alkalic porphyry Cu- Au; 092HNE243, 55, 191, 244	na	41 holes, 26,103 m drilling, IP, soil surveys, trenching. Southern Gate zone highlights included 735.4 m grading 0.24% Cu, 0.14 g/t Au and 0.71 g/t Ag. Within this was a 117 m interval grading 0.69% Cu, 0.46 g/t Au and 2.22 g/t Ag.
Newton	South Central	Carlyle Commodities Corp.	Au, Ag; Epithermal Au- Ag-Cu (high sulphidation)	Inf.: 42,396,600 t 0.63 g/t Au, 3.43 g/t Ag	Updated resource estimate 2022. Preparation for late 2022-early 2023 drilling.
New Brenda	South Central	Flow Metals Corp.	Au, Ag, Cu; Au-quartz veins; 092HNE289, 302, 303	na	Geological mapping, sampling, up to 53.5 g/t Au, 32.3 g/t Au.
New Craigmont	South Central	Nicola Mining Inc.	Cu, Au; Cu skarn; 092ISE035	18.669 Mt 0.13% Cu. Craigmont waste dumps in Portal Area and Southern Dump 0.06% Cu cut off.	Permitting, ZTEM and soil geochemistry.
Placer Mountain	South Central	Damara Gold Corp.	Au, Ag; Au-quartz veins; 092HSE262, 263	na	2021 results released, highlight 3.0 m grading 39.2 g/t Au.
Quesnel Nickel	South Central	Green River Gold Corp.	Ni, Co, talc; Mafic- ultramafic; 093A 130, 093H 061, 139	na	Portable drill results include Mg, Ni, Co, Cr values.

 Table 7. Continued.

Rabbit North	South Central	Tower Resources Ltd.	Cu, Au; Alkalic porphyry Cu- Au; 092INE045, 147	na	Drilling of gold discovery (Lightning zone), another new gold target identified based on trail of gold in till. Initial drill results included 95.0 m grading 1.40 g/t Au including and interval of 19.2 m with 4.21 g/t Au.
Reliance Gold	South Central	Endurance Gold Corporation	Au, Ag, Sb; Au-quartz veins, Stibnite veins and disseminations; 092JNE033, 136, 191	na	Drilling of Eagle zone and feeder structures.
Shovelnose	South Central	Westhaven Gold Corp.	Au, Ag; Epithermal Au-Ag-Cu low sulphidation; 092HNE309, 308	I: 10,592,000 t 2.32 g/t Au, 11.43 g/t Ag Inf: 9,177,000 t 0.89 g/t Au, 3.47 g/t Ag	Pit-constrained resource at South zone, 0.35 g/t AuEq cut off.
Skoonka Creek	South Central	Westhaven Gold Corp.	Au, Ag; Epithermal Au-Ag-Cu low sulphidation; 092ISW104, 129, 105, 126	na	Drilling 16 holes, 3340 m. Initial drill results included 5.66 m grading 6.83 g/t Au and 1.90 m grading 21.15 g/t Au.
Wingdam	South Central	Omineca Mining and Metals Ltd.	Au; Au-quartz veins; 093H 012	na	Drilling lode gold targets. Began placer gold recovery.
Woodjam	South Central	Vizsla Copper Corp.	Cu, Au; Alkalic porphyry Cu- Au; 093A 269, 78	Southeast zone Inf: 227.5 Mt 0.31% Cu Deerhorn zone Inf: 32.8 Mt 0.49 g/t Au, 0.22% Cu Takom zone Inf: 8.3 Mt 0.26 g/t Au, 0.22% Cu	Vizsla Copper to acquire Consolidated Woodjam Copper.
Yellowhead	South Central	Taseko Mines Limited	Cu, Au, Ag; Noranda/ Kuroko; 082M 008, 9	M+I: 1292 Mt 0.25% Cu, 0.028 g/t Au, 1.2 g/t Ag Inf: 109 Mt 0.24% Cu, 0.026 g/t Au, 1.2 g/t Ag, 0.15% Cu cut off	Engineering and community relations.
Adamant	Southeast	Eagle Plains Resources Ltd.	REE; Nepheline syenite; 082M 173	na	Silt sampling, geological mapping, channel samples, metallurgical studies.
Big Ledge	Southeast	Stuhini Exploration Ltd.	Zn, Pb, Ag; Sedimentary exhalative Zn- Pb-Ag; 082LSE012	Inf: 100 Mt 4% Zn (1980, noncompliant)	Airborne TDEM, magnetic.

 Table 7. Continued.

Duncan Lake Zinc	Southeast	Rokmaster Resources Corp.	Zn, Pb, Ag; Mississippi Valley-type Pb- Zn; 082KSE023	na	3 DDH 681 m.	
Ice River	Southeast	Eagle Plains Resources Ltd.	REE; Nepheline syenite; 082N 028	na	Mapping, rock & soil sampling.	
Kena	Southeast	West Mining Corp.	Au; Alkalic, Porphyry Cu- Au; 082FSW237	na	9 DDH 2400 m; metallurgical testing.	
Kenville Gold Mine	Southeast	Ximen Mining Corp.	Au; Au-quartz veins; 082FSW086	na	Ongoing mine rehabilitation, material acquisition, rock sampling, dump volume surveys. Samples from dump at former Protection mine returned an average grade of 9.5 g/t Au, 47.5 g/t Ag, 1.13% Pb, and 1.37% Zn; sample from former Wilcox mine dump with 2.39 g/t Au.	
Kootenay	Southeast	Wealth Minerals Ltd.	Au; Polymetallic veins Ag-Pb- Zn±Au; 082KSW088	na	Prospecting, rock sampling.	
Midnight/ I.X.L./OK	Southeast	West High Yield Resources Ltd.	Au; Polymetallic veins Ag-Pb- Zn±Au; 082FSW119	na	41 DDH 6202 m. Selected early results: 1.5 m with 15.7 g/t Au and 2.9 g/t Ag, and 1.05 m with 33.7 g/t Au and 3.5 g/t Ag.	
Revel Ridge	Southeast	Rokmaster Resources Corp.	Pb, Zn, Ag; Irish-type carbonate- hosted Zn-Pb; 082M 003	M+I: 6.7 Mt 50 g/t Ag, 3.69 g/t Au, 1.93% Pb, 3.68% Zn Inf: 6 Mt 37 g/t Ag, 4.7 g/t Au, 1.19% Pb, 2.2% Zn (2021)	14 DDH (10 underground, 4 surface); rock and soil sampling, stream sampling. Selected highlights: Main zone 4.35 m grading 2.57 g/t Au, 17.11 g/t Ag, 0.66% Pb, and 1.94% Zn; Yellowjacket zone 4.45 m grading 0.01 g/t Au, 5.32 g/t Ag, 0.06% Pb, and 0.87% Zn.	
Slocan Graphite	Southeast	Aben Resources Ltd.	Graphite; Crystalline flake graphite; 082FNW285	na	Mapping; rock and soil sampling.	
Thor	Southeast	Taranis Resources Inc.	Base metals; Polymetallic manto Ag-Pb- Zn; 082KNW030	na	Mapping, rock and soil sampling, soil geochemistry, aeromagnetic survey, ground VLF survey. Ripper zone channel: 0.33 m grading 12.5 g/t Au, 1100 g/t Ag, 0.03% Cu, 14.9% Pb, and 0.10% Zn.	
Yee Haw	Southeast	Lithium Corporation	Ti-REE; Lamprophyric dike	na	Prospecting, hand trenching.	

Table 7. Continued.

Empire Mine	Southwest	Coast Copper Corp.	Au, Ag, Cu, Fe, Co; Fe skarn, Cu skarn; 092L 044, 45, 46	M+I: 960,000 t 2 g/t Au, 5.6 g/t Ag, 0.34% Cu, 0.013% Co Inf: 120,000 t 1.2 g/t Au, 2.8 g/t Ag, 0.13% Cu, 0.008% Co	Drilling 10 holes, 1483.7 m, underground survey, sampling with highlights 3.37 g/t Au, 0.97% Cu and over 1% Co.
Le Mare	Southwest	Homegold Resources Ltd.	Cu, Mo, Au, Ag, pyrophyllite; Porphyry Cu±Mo±Au; 92L 381, 328, 385, 378, 380, 329, 382, 379	na	Airborne geophysics, geology.
Mount Sicker	Southwest	Sasquatch Resources Corp.	Cu, Au, Ag, Pb, Zn; Kuroko massive sulphide Cu-Pb- Zn; 092B 040, 76, 110, 1	na	Lidar survey, inversion of geophysical data.
North Island	Southwest	Northisle Copper and Gold Inc.	Cu, Au, Mo, Re; Porphyry Cu±Mo±Au; 092L 185, 240, 200	I: 527,344,000 t 0.20% Cu, 0.24 g/t Au, 0.008% Mo, 0.31 ppm Re Inf: 417,272,000 t 0.15% Cu, 0.18 g/t Au, 0.006% Mo, 0.29 ppm Re	Resource includes both Hushamu and Red Dog deposits. Work in 2022 included drilling, mapping and geophysics.
Okeover	Southwest	Alpha Copper Corp.	Cu, Mo; Porphyry Cu±Mo±Au; 092K 008, 57, 168	Inf: 86.8 Mt 0.31% Cu, 0.014% Mo	Drilling, approx. 2000 m planned.
Rogers Creek	Southwest	Cascade Copper Corp.	Cu, Mo, Au, Ag; Porphyry; 092JSE033, 34, 35, 36	na	Lidar survey, rock sampling and mapping.

M = Measured; I = Indicated; Inf = Inferred

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.

At their **Eskay-Corey** property, Eskay Mining Corp. 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, and 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, and 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.

Skeena Resources Ltd.'s **Eskay Creek** project has been the focus of considerable exploration since 1932. In 1988, the news of drilling intersecting stratiform stibnite-realgar rich mineralization 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 and 96.02 m grading 1.13 g/t Au, 6.6 g/t Ag.

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.

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.

Strikepoint Gold Inc.'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 gold-silver 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.

Thesis Gold Inc. 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 rock 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.

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.

Scottie Resources Corp.'s **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.

In March, Hochschild Mining PLC 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 for the **Snip Gold** project. 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. 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.

Brixton Metals Corporation 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.

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.

Exploration at CopAur Minerals Inc.'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.

8.1.2. North Central Region

Independence Gold Corp. completed a winter drill program of 4185 m in 17 holes at their **3Ts** project. Ten holes were drilled at the Ted-Mint target, five holes at the Tommy target, and two holes at the new Balrog target. Highlight results included 30.0 m grading 4.99 g/t Au, and 53.3 g/t Ag. The company announced a fall surface mapping and sampling program between the Ted-Mint and Tommy targets. A recent technical report (August 18, 2022) disclosed combined in-pit and underground components of the Tommy and Ted-Mint vein systems containing a total Inferred resource estimate of 4.47 Mt grading 3.64 g/t Au and 96.26 g/t Ag, at a cut off grade of 0.4 g/t AuEq in-pit and 2.0 g/t AuEq underground, containing 522,000 ounces of gold and 13,800,000 ounces of silver.

Benchmark Metals Inc. completed more than 18,829 m of resource and exploration drilling and 1447 m of geotechnical and hydrogeological drilling at their **Lawyers** project. As well, they announced a Preliminary Economic Assessment and an updated mineral resource estimate. The economic assessment results included a pre-tax NPV 5% of \$939 million, with IRR of 31.4%, and 2-year payback. The updated resource estimate reported on pit-constrained and out-of-pit resources. Pit-constrained resources at a 0.4 g/t AuEq cut off were reported as Measured 20.3 Mt grading 2.21 g/t Au, 30.5 g/t Ag, Indicated 45.5 Mt grading 1.09 g/t Au, 18.2 g/t Ag, and Inferred 2.3 Mt grading 0.91 g/t Au, 12.8 g/t Ag. Out-of-pit resources at a 1.5 g/t AuEq cut off were reported as Indicated 1.6 Mt grading 2.74 g/t Au, 60.6 g/t Ag, Inferred 2.6 Mt grading 3.32 g/t Au, 56.3 g/t Ag.

Kestrel Gold Inc. continued to explore at their **QCM** project. A total of 1272 m of reverse circulation drilling was completed in 14 holes. Highlight results included 44.19 m grading 2.33 g/t Au and 149.35 m grading 0.59 g/t Au.

Golden Cariboo Resources Ltd. completed two diamond-drill holes totalling 733.9 m at their **Quesnelle Gold Quartz** project. One hole intersected two quartz veins in a 15.2 m interval (true width estimated at 10 m). The widths of the veins were not announced. Reported assays were 0.6 m grading 17.5 g/t Au, and 61.5 g/t Ag, and 0.5 m grading 1.94 g/t Au.

TDG Gold Corp. completed 5034 m of oriented core diamond drilling in 21 drill holes at its **Shasta** project. They also filed an initial NI 43-101 mineral resource estimate based on a combination of historic drilling and 2021 drilling. At a cut off grade of 0.3 g/t AuEq they reported an Inferred resource of 22.01 Mt grading 0.79 g/t Au and 26.7 g/t Ag. Reported results

for late 2021 drilling included 34 m grading 7.19 g/t Au and 105 g/t Ag.

8.1.3. South Central Region

Talisker Resources Ltd. drilled 140,476 m in 286 holes at their **Bralorne** project between February 2020 and October 2022. A new resource estimate is planned to replace their 2020 estimate. Drilling has extended from surface to a depth of about 700 m. Most of the resource area is between historic mines. Talisker has reported numerous narrow, high-grade intersections from the current drilling. Highlight intersections include 1.3 m of 42.61 g/t Au within 3.70 m of 15.51 g/t Au. Average vein width is 1.6 m in the resource area.

Gelum Resources Ltd. completed three holes (800 m) of a planned 11-hole (3000 m) program at their **Eldorado** project late in 2022. The company also completed an airborne magnetic and VTEM survey (890 line km). The target is orogenic vein gold.

Tempus Resources Ltd. focussed on their **Elizabeth** property, the southern portion of the linked Blackdome-Elizabeth project, with 40 holes drilled for a total of approximately 9760 m. The Blue Vein, a 2021 discovery, was targeted by 21 holes and the No. 9 vein was targeted by 10 holes. Initial results included 2.11 m of 87.0 g/t Au at the No. 9 vein. The Ella zone, SW vein, and Main/West zone were also drilled. The linked **Blackdome** and **Elizabeth** properties were the subject of a 2010 Preliminary Economic Assessment in which mining would occur at both sites, with processing at an existing mill at **Blackdome**.

Karus Gold Corp. announced results of 2021 drilling at its **FG Gold** and **Gold Creek** projects in 2022. Among the highlights was 59.35 m grading 1.13 g/t Au including 17.87 m grading 2.23 g/t Au at **FG Gold** and 80.65 m grading 0.5 g/t Au including 46.4 m grading 0.74 g/t Au at **Gold Creek**. The company filed a technical report covering both properties. The company also announced signing a non-binding letter of intent to be acquired by Kenadyr Metals Corp., valuing Karus at \$19.7 million. Karus' principal assets are its Cariboo district gold properties.

Kingfisher Metals Corp. conducted an induced polarization survey, rotary air blast (RAB) and diamond drilling (total approximately 10,000 m as of October) on its **Goldrange** project in 2022. Results of RAB drilling at the Day Trip zone included 4.6 m of 2.7 g/t Au, 12.2 m of 0.5 g/t Au, 4.6 m of 2.1 g/t Au, and 9.1 m of 0.8 g/t Au. The company reported anomalous portable X-Ray fluorescence analyses at the Langara zone and intervals of vein, breccia, and disseminated sulphide at the Could Drifter trend. Initial diamond drill results at the Cloud Drifter included 40 m grading 2.86 g/t Au, with 9 m grading 5.56 g/t Au, 1 m grading 58.88 g/t Au, 2 m grading 19.54 g/t Au, 1 m grading 10.39 g/t Au, and 2 m grading 9.55 g/t Au. Mineralization at the Cloud Drifter includes a 35 m interval of strongly altered and mineralized quartz diorite.

Sego Resources Inc.'s Miner Mountain project is considered

prospective for porphyry-style mineralization, but 2020-21 results attracted the company's focus to porphyry related gold mineralization. Seven holes totalling 1582 m were drilled and results included 80 m grading 0.95 g/t Au.

Carlyle Commodities Corp. updated the resource estimate for their **Newton** project to a pit-optimized Inferred 42.4 Mt 0.63 g/t Au and 3.43 g/t Ag with a 0.25 g/t Au cut off. They have a permit to drill and completed some preparatory work. As of December, a 14-hole infill and step-out program was scheduled to begin.

Flow Metals Corp. followed up 2021 airborne magnetic results with geological mapping and sampling at their **New Brenda** project. Highlight samples returned 53.5 g/t and 32.3 g/t Au, with highly anomalous bismuth and tellurium in a hand-trenched vein carrying visible gold and bismuthinite.

Damara Gold Corp. completed a drilling program at its **Placer Mountain** project in December 2021. Highlight results released in 2022 included 1.40 m grading 34.12 g/t Au and 87.74 g/t Ag, 3.0 m grading 39.2 g/t Au and 80.4 g/t Ag, 1.35 m grading 46.51 g/t Au and 32.2 g/t Ag, and 1.30 m grading 31.80 g/t Au and 47.3 g/t Ag. The company expanded their land holdings in 2022.

Tower Resources Ltd. identified the source of a gold grain anomaly in till and reported an initial drill intersection of 95.0 m grading 1.40 g/t Au including and interval of 19.2 m with 4.21 g/t Au in this new discovery, referred to as the 'Lightning zone' at their **Rabbit North** project. Follow up in 2022 included additional drilling and till sampling that indicated another gold dispersal train, called the Central Train, 400 m west of the Lightning zone. Seventeen new samples yielded between 40 to 452 gold grains per sample leading to a target under young (possibly Miocene) basalts. The **Rabbit North** project also hosts alkalic porphyry Cu-Au targets.

Endurance Gold Corporation reported 38 diamond-drill holes totalling 8274 m and 33 reverse circulation holes totalling 2455 m at their **Reliance Gold** project in 2022. The primary targets were the Eagle zone and structures interpreted as feeders to that shallowly dipping, near-surface target. Highlight feeder zone (Eagle South Feeder) intersections included 11.6 m grading 7.31 g/t Au, 12.1 m grading 4.95 g/t Au, 13.5 m grading 8.06 g/t Au, 11.9 m grading 8.31 g/t Au, and 4.3 m grading 16.66 g/t Au. Highlight intersections from the overlying Eagle zone included 12.0 m grading 7.68 g/t Au, and 30.48 m grading 6.64 g/t Au (Fig. 3). Significant intersections in the Eagle South Feeder zone span about 400 m strike length. Endurance expanded their land holdings in the Gold Bridge area in 2022.

In January, Westhaven Gold Corp. announced an initial pit-constrained mineral resource estimate for the South zone at their **Shovelnose** project of 10.6 Mt grading 2.32 g/t Au and 11.43 g/t Ag Indicated and 9.2 Mt grading 0.89 g/t Au and 3.47 g/t Ag Inferred. Drilling in 2022 (approximately 100 holes, 40,000 m) included peripheral targets off the main mineralized structure, a 4 km trend including the South zone, FMN and Franz targets. The company discovered a gold-bearing zone 1.2 km northeast of the South zone resource area. Highlight results at

FMN included 23.03 m grading 37.24 g/t Au and 209.52 g/t Ag, and 14.96 m grading 5.96 g/t Au and 343.57 g/t Ag. Detailed mapping at a 1:100 scale at Franz was carried out to guide surface sampling and complement earlier drilling. Westhaven also drilled 3340 m in 16 holes at their **Skoonka Creek** project, another of their properties in the Spences Bridge belt. The program was designed to step out from previous drilling on an epithermal vein system. Initial results included 5.66 m grading 6.83 g/t Au and 1.90 m grading 21.15 g/t Au.

Omineca Mining and Metals Ltd. resumed lode gold exploration drilling in the late summer and fall. Targets included Skopos, about 900 m south of their placer mine **Wingdam** project and Mary Creek, about 6 km northwest of Wingdam.

8.1.4. Southeast Region

West Mining Corp. continued exploration at their **Kena** project. The project includes three adjacent properties (Kena, Daylight, and Athabasca) that extend along a 20 km trend. The properties cover known mineralized zones and historical mine sites. Mineralization comprises quartz-pyrite stockwork and veinlet zones in bleached and silicified Jurassic plagioclase porphyry of the Silver King intrusion and well-foliated, pyritic intermediate volcanic rocks of the Elise Formation. In 2022, the company had composite drill core samples from the Kena Gold zone and the Gold Mountain zone drilled in 2021 examined for crushing, milling, and recovery characteristics. Results indicate the mineralization is amenable to whole-ore cyanidation and sulphide flotation processes. Additionally, property work comprised drilling of 9 diamond-drill holes for a total of 2400 m at the Gold Mountain zone.

Ximen Mining Corp. continued mine rehabilitation at its **Kenville Gold Mine** project. Site facility structures and portal support materials, plus many ancillary items are being acquired.

Mine permitting is ongoing. The company preformed rock sampling and volume surveying of the dumps at the Protection and Wilcox mines, southeast of Kenville mine. The Wilcox samples yielded 2.39 g/t Au and the Protection dump samples yielded an average grade of 9.5 g/t Au, 47.5 g/t Ag, 1.13% Pb, and 1.37% Zn. A small soil sampling survey was done in an area immediately southeast of the Kenville mine and 36.4 km² of lidar surveying was carried out over the historic mine site and surrounding area.

West High Yield Resources Ltd. drilled 41 holes for 6202 m on its Midnight/I.X.L./OK property near Rossland. Drilling was divided into two sets of holes. The first set was focussed on near-surface targets (0-200 m depth) southeast and east of the historical high-grade Baker Vein, near a listwanite (quartz-carbonate-serpentine) zone that straddles an east-northeast trending fault juxtaposing an ultramafic intrusion and predominantly Jurassic andesites. The second set was focussed on targets of depths of 200-600 m, below the Baker vein. Multiple high-grade precious metals intersections were made, several with visible gold. Selected assay highlights from early results of typically 1.5 m sample intervals yielded grades of 38.4, 36.1, 22.6 and 20.7 g/t Au. Highlights from a later release

included 1. 5 m grading 15.7 g/t Au, 2.9 g/t Ag and 1.05 m grading 33.7 g/t Au, 3.5 g/t Ag.

8.2. Selected porphyry (Cu-Au, Cu-Mo, Mo) projects 8.2.1. Northwest Region

Surge Copper Corp. 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. Surge announced in late fall, commencement of a Preliminary Economic Assessment.

At Libero Copper & Gold Corporation's **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.

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.

Seabridge Gold Inc.'s **Iskut** project includes the former Johnny Mountain mine and the Bronson Slope coppergold 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.

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.

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.

Surge Copper Corp.'s **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 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.

Sanatana Reslources Inc.'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.

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.

The **Schaft Creek** project is an advanced-stage joint venture (Teck Resources Limited 75%, Copper Fox Metals Inc. 25%) 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. Brixton Metals Corporation 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.

8.2.2. North Central Region

NorthWest Copper Corp. continued exploration on their **East Niv** project with 4390 m drilling in eight diamond-drill holes, a 31.1 line-km ground-based induced polarization survey, 1260 line-km of airborne magnetic surveying, rock (206) and soil (745) sampling, and geological mapping. Rock chip samples along a 13 km trend returned copper and silver assays. Highlight results included 11 samples grading from 1.08% Cu to 6.55% Cu with Ag grades between 3.7 g/t and 262.0 g/t.

Pacific Empire Minerals Corp. continued exploration on its **Jean Marie** project. The company completed two diamond-drill holes totalling 700 m. Both holes intersected copper mineralization. One hole intersected 155 m grading 0.18% Cu, 19 ppm Mo, and 1.0 g/t Ag. The other intersected a 282 m interval grading 0.21% Cu, 27 ppm Mo, and 1.3 g/t Ag including 76 m grading 0.45% Cu, 71 ppm Mo, and 3.0 g/t Ag. These results extended known copper mineralization along strike and at depth.

Amarc Resources Ltd. carried out geological mapping, sampling (2648 soil, 313 surface rock), induced polarization ground surveys, and diamond drilling at their **Joy** project. Amarc is the project operator, but Freeport-McMoRan Properties Canada Inc. is funding the exploration under an earn-in agreement. Diamond drilling consisted of 15,427 m in 37 holes at the Pine deposit and at several district porphyry copper-gold targets. More than 56 line-km of IP surveying was completed.

Pacific Ridge Exploration Ltd. completed 7015 m of drilling in 12 drill holes at their **Kliyul** project. Drilling intersected porphyry copper-gold style mineralization, including pyrite, chalcopyrite, and lesser bornite in veins and as disseminations. The Kliyul Main zone (KMZ) was extended to the north, south, and at depth across and area approximately 550 by 200 m and 600 m deep. Highlight results included 588.0 m grading 0.12% Cu, 0.39 g/t Au, and 0.90 g/t Ag, and 527.8 m grading 0.19% Cu, 0.30 g/t Au, and 1.35 g/t Ag.

NorthWest Copper Corp. completed 29 diamond-drill holes totalling 11,871.80 m at their **Kwanika** project. Results expanded the footprint of the deposit and increased the confidence of the mineral resource estimate. High-grade intersections from the core of the deposit included 304.20 m grading 0.47% Cu, 0.53 g/t Au, and 1.7 g/t Ag. Drill results from the northern extension of the deposit included 364.20 m grading 0.17% Cu, 0.17 g/t Au, and 0.8 g/t Ag. Northwest also announced 2867 m of diamond drilling in seven holes at their **Lorraine** project. Other work included induced polarization and electromagnetic surveys. Before the drilling, NorthWest announced an updated mineral resource estimate for the project's mineralized zones (Lower Main, Upper Main, and Bishop). At a cut off grade of 0.2% Cu, total Indicated resources

are 12.95 Mt grading 0.55% Cu, 0.16 g/t Au, and total Inferred resources are 45.45 Mt grading 0.43% Cu, 0.1 g/t Au.

Mount Milligan (Brownfield) mine site exploration by Centerra Gold Inc. included more than 28,266 m in 54 holes. The drilling focussed on six target areas up to 1 km west of the 2020 ultimate pit boundary and within the M-236 mine reclamation boundary. Six km south of the mine site, Centerra was active on their Mount Milligan (Greenfield) project with 804 m of diamond drilling in two holes at the Fugro-2 target. Exploration continued for new porphyry copper-gold deposits and low-sulphidation epithermal gold-silver deposits in the Mount Milligan tenement package.

Pacific Ridge Exploration Ltd. completed 1861 m of diamond drilling in six holes at their **RDP** project. Pacific Ridge was the operator, but the program was funded by Antofagasta Minerals S.A., a subsidiary of Antofagasta PLC, who can earn a 75% interest in the project by spending \$10 million on exploration.

8.2.3. South Central Region

Engold Mines Ltd.'s **Lac La Hache** project includes Cu-Fe skarn, Au vein and breccia, and porphyry Cu targets. Resource estimates exist for several (Table 7). Drilling in 2022 at the Aurizon gold deposit returned an initial highlight of 7.11 m grading 5.7 g/t Au, 0.90% Cu, 0.60 g/t Ag, and 2.5 m grading 8.8 g/t Au, 1.02% Cu, 81.8 g/t Ag. Deep drilling at the Ann North alkalic porphyry target encountered a 655 m interval of low-grade Cu mineralization grading 0.10% Cu, 0.04 g/t Au, 0.03 g/t Ag. Engold Mines reported some 2021 results in 2022 including 34 m grading 0.48% Cu, 0.07 g/t Au, 1.57 g/t Ag from south of the G-1 skarn deposit.

Kodiak Copper Corp. continued to drill at their **MPD** project, with a 41 hole, 26,103 m program, and conducted induced polarization and soil geochemical surveys. Southern Gate zone highlights included 735.4 m grading 0.24% Cu, 0.14 g/t Au and 0.71 g/t Ag. Within this was a 117 m interval grading 0.69% Cu, 0.46 g/t Au and 2.22 g/t Ag. The Gate zone was traced along a 1 km strike length and to a depth of 900 m. Kodiak reported discovering a near-surface Au-Ag target south of the Gate zone and Man zone. Highlights from trenches included 2 m grading 9.11 g/t Au and 24 g/t Ag, 2 m grading 5.29 g/t Au and 27.7 g/t Ag. MPD is a consolidation of the Man, Prime, and Dillard alkalic porphyry Cu-Au targets, which had historically been explored to about 200 m depth. The Gate zone, a 2019 discovery, indicated that significant Cu-Au mineralization extended to greater depths.

Consolidated Woodjam Copper Corp. announced 2021 drill results early in 2022 for their **Woodjam** project, including a highlight of 24.0 m grading 3.12 g/t Au, and 0.18% Cu at Deerhorn. In September, Vizsla Copper Corp. announced an agreement to acquire Consolidated Woodjam Copper Corp. for Vizsla shares. The deal has shareholder and court approval and Consolidated Woodjam will de-list when the transaction closes. Woodjam comprises six zones in a cluster approximately 5 km in diameter. The Deerhorn zone has an Inferred resource of 32.8 Mt grading 0.49 g/t Au and 0.22% Cu.

8.2.4. Southwest Region

Homegold Resources Ltd. reported carrying out an airborne magnetic and radiometric survey and geological work on the **Le Mare** property, where there are several porphyry Cu-Mo targets.

Northisle Copper and Gold Inc. drilled approximately 6390 m in 15 holes at its **North Island** Project, including 9 holes at and near the Hushamu resource area. A highlight included 49.5 m grading 0.345% Cu 0.435 g/t Au, 0.014% Mo, and 0.736 g/t Re. The company also reported another intersection in a step out hole 200 m from the model pit shell, where mineralization had not been recognized, of 100.9 m grading 0.204% Cu, 0.890 g/t Au, 0.014% Mo, and 0.573 g/t Re. Work in 2022 also included mapping, sampling, and surface geophysics at a (re) discovery referred to as 'Downward Dog'. A 2021 Preliminary Economic Assessment was updated and there was some metallurgical testing of Hushamu, Red Dog, and Northwest Expo. Of more than seven Cu-Au-Mo±Re porphyry targets and deposits spanning approximately 40 km west-northwest of the past producing Island Copper mine, two deposits have resource estimates. Hushamu has an Indicated resource of 472.9 Mt grading 0.20% Cu, 0.23 g/t Au, 0.008% Mo, and 0.35 ppm Re plus a large Inferred resource. Red Dog has an Indicated resource of 54.5 Mt grading 0.22% Cu, 0.31 g/t Au, and 0.004% Mo.

Alpha Copper Corp. mobilized to their **Okeover** project in the fall for a planned 2000 m of drilling at the North Lake zone where there is an existing resource. The North Lake zone is at the northern end of a north-northwest trending string of porphyry Cu-Mo targets related to younger intrusions in Cretaceous diorite-granodiorite of the Coast Plutonic complex.

Cascade Copper Corp. acquired the **Rogers Creek** property from Tocvan Ventures Corp. Cascade carried out a lidar survey, rock geochemistry, and geological mapping, including alteration mapping using Terraspec spectrometry.

8.3. Selected polymetallic and precious metal projects 8.3.1. Northwest Region

P2Gold Inc. drilled 95 holes totalling 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.

Core Assets Corporation 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.

Goliath Resources Ltd.'s **Golddigger** property is 7 km west of the Dolly Varden mine access road. At the Surebet and Main zone, stratabound massive sulphide mineralization (galenasphalerite-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.

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.

Juggernaut Exploration Ltd. 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 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 Ag, 1.585% Cu, and 1.77% Zn.

Finlay Minerals Ltd.'s **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.

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 Metals Corp. 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 grading 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.

Coeur Mining Inc.'s 2022 exploration program at their **Silvertip** mine included 61,000 m of drilling in 330 holes. 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.

8.3.2. Northeast Region

Fabled Copper Corp. carried out prospecting, mapping, sampling, magnetic and VLF ground surveying, unmanned aerial vehicle photogrammetry surveying, and lidar surveying at historic underground workings at their **Muskwa** project. The project consists of the Neil, Toro, and Bronson properties. A surface sample at Bronson assayed 23.10% Cu, 36.50 g/t Au.

Four of five samples from the Brad vein at the Toro project returned values of more than 0.5% Cu. The highest value was 13.85% Cu with 0.15 g/t Au and 7.42 g/t Ag. North of the Brad vein a sample assayed 13.85% Cu. West of the Toro vein; eight of twelve samples assayed over 0.5% Cu; the highest value was 10.55% Cu. A new discovery at Toro (Target 11 vein) assayed 1.52% Cu. Fabled Copper has applied for a five-year land use permit to allow diamond drilling. Fabled Copper also contributed to the Gataga River Basin cleanup project managed by the Northeastern British Columbia Wildlife Fund. Fabled Copper supplied helicopter time and manpower to remove legacy waste in the project area, including 2360 kg of fuel drums and 1896 kg of miscellaneous waste.

8.3.3. North Central Region

At their **Indy** project, InZinc Mining Ltd. completed 2616 m of diamond drilling in 17 holes. Drilling tested three new areas with soil geochemistry anomalies (Fox East, Keel, and Echo central area) and their known B-9 zone. Reported results included 3.0 m grading 2.8% Zn, 0.6% Pb, and 3.8 g/t Ag and 3.6 m grading 3.5% Zn, 0.6% Pb, and 6.4 g/t Ag. InZinc also completed 1100 line-km of airborne geophysics.

NorthWest Copper Corp. was active at its **Stardust** project, a high-grade carbonate replacement deposit 7 km from the Kwanika deposit. NorthWest completed 6698.20 m in ten diamond-drill holes to expand the known resource. Highlight results include 44.20 m grading 0.84% Cu, 0.51 g/t Au, and 13.7 g/t Ag and 75.95 m grading 0.55% Cu, 0.50 g/t Au, and 10.9 g/t Ag.

8.3.4. South Central Region

Newport Exploration Ltd. updated the resource estimate for the **Chu Chua** deposit in December 2021. At a 1% Cu cut off the pit-constrained Inferred resource is 2.289 Mt grading

2.11% Cu, 0.30% Zn, 9.99 g/t Ag, and 0.5 g/t Au. They propose infill and step out drilling. Nicola Mining Inc. conducted a 1029 line-km ZTEM survey and a soil geochemical survey at their **New Craigmont** project. They obtained a permit for drilling up to 190 holes, trenching (up to 12 km), and conducting an induced polarization survey. The Craigmont mine was a copper skarn, but current targets include porphyry copper mineralization.

Yellowhead is a feasibility-stage bulk-tonnage copper project, previously in the environmental assessment process as the Harper Creek project. Taseko Mines Limited is focussing on re-entering the environmental assessment process through engineering work and engagement with local communities, including First Nations. The company is also collecting baseline data and developing models that will be used to support environmental assessment and permitting. Taseko announced results of an updated Feasibility Study in 2020, including a new development plan and resource estimate. Proven and Probable reserves now stand at 817 Mt grading 0.28% Cu at a 0.17% cut off. Although porphyry-like in its bulk tonnage and grade, Yellowhead is generally considered a marine volcanogenic and syngenetic deposit. It is hosted by metavolcanic and metasedimentary rocks of the Eagle Bay assemblage (Lower Cambrian to Mississippian).

8.3.5. Southeast Region

Stuhini Exploration Ltd. completed an airborne electromagnetic (TDEM) and magnetic survey over its **Big Ledge** property, covering 51 km². Known mineralization consists of sphalerite, pyrite, pyrrhotite, galena, hosted in highly folded marble and quartzite within the Shuswap metamorphic complex of the Monashee Group (Proterozoic). Cominco previously explored the property and released an historical resource of 100 Mt grading 4% Zn in 1980.

Assessment work was completed on Rokmaster Resources Corp.'s **Duncan Lake** property. Three holes were wedged off former Cominco hole 97-12, for a total of 681 m drilled. Hole D22-02 intersected 34.75 m of semi-massive pyrite-sphaleritegalena mineralization that graded 7.03 g/t Ag, 1.56% Pb and 1.76% Zn, including an interval of 3.66 m grading 17.28 g/t Ag, 7.29% Pb and 4.94% Zn. The holes intersected similar intervals of lead-zinc-silver mineralization that were seen in hole 97-12.

Wealth Minerals Ltd., completed a helicopter-borne VTEM and magnetic survey across 5456 hectares (12,014 line-km) of its **Kootenay** project, which comprises the Goldsmith, Lardeau and Ledgend claim blocks. At Goldsmith, gold mineralization is in listwanite-altered ultramafic rocks and the area also has nickel-cobalt mineralization associated with ultramafic bodies.

Ground follow up on targets identified in the geophysical survey led to the discovery of a 6 m-wide zone of massive sulphide mineralization in the Ledgend claim block. Sphalerite, hydrozincite, chalcopyrite, bornite and pyrite were visually identified in outcrop. In addition, two outcrops of sulphide mineralization, containing pyrite-pyrrhotite with minor

chalcopyrite and sphalerite, were located on the Goldsmith block. The showings coincide with geophysical anomalies and previous geochemical soil sampling anomalies.

At Rockmaster Resources Corp.'s Revel Ridge project, 14 holes (10 underground and 4 surface) totalling 4803 m were completed, primarily testing extension of mineralization at the Main and Yellowjacket zones. Highlights from the Main zone include 4.35 m grading 2.57 g/t Au, 17.11 g/t Ag, 0.66% Pb, and 1.94% Zn and the Yellowjacket zone 4.45 m grading 0.01 g/t Au, 5.32 g/t Ag, 0.06% Pb, and 0.87% Zn. The company also completed mapping, prospecting, and geochemical sampling across the property. A total of 62 channel samples, 91 rock samples, 562 soil samples, and 70 stream sediment samples were taken. In January 2022, the company released an updated mineral resource estimate that included 2021 drilling results. Current to November 2021 the company reported a Measured and Indicated resource of 6.734 Mt grading 50 g/t Ag, 3.69 g/t Au, 1.93% Pb, and 3.68% Zn, an Inferred resource of 5.996 Mt grading 37 g/t Ag, 4.7 g/t Au, 1.19% Pb, and 2.2% Zn.

8.3.6. Southwest Region

Coast Copper Corp. drilled 10 holes totalling 1483.7 m at their **Empire Mine** project in the spring and contracted geological work and an underground survey of the Kingfisher, a past-producing underground magnetite iron mine. Significant drill intersections included Au, Cu, Ag and Co values. Individual underground samples also returned up to 3.37 g/t Au, 0.97% Cu, and over 1% Co. The deposits are Cu-Fe skarns in Vancouver Group and lower Bonanza Group rocks intruded by diorite to gabbro of the Island Plutonic suite.

Sasquatch Resources Corp. reported a lidar survey and geophysical inversion of airborne time domain electromagnetic data and produced a NI-43-101 technical report for their **Mount Sicker** project. Mount Sicker hosts several past-producing VMS deposits hosted by Sicker Group volcanic rocks (Paleozoic) and Mount Hall gabbro (Triassic).

8.4. Selected tungsten projects

8.4.1. South Central Region

At their **Fox Tungsten** project, Happy Creek Minerals Ltd. carried out prospecting and mapping in 2022 and reported results of 2021 drilling, including 6.7 m grading 0.43% WO₃ with 1.2 m grading 1.83% WO₃ in the Nightcrawler zone. This zone is 5-6 km south of the existing resource area.

8.5. Selected Ni-Cu-Co-precious metal projects 8.5.1. Northwest Region

Garibaldi Resources Corp.'s **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 four holes. Drilling intersected nickel-bearing disseminated and semi-massive sulphide

mineralization, extending mineralization at depth by 205 m.

Giga Metals Corp.'s Turnagain nickel-cobalt deposit is an Alaskan-type Pt-(Os-Rh-Ir) ultramafic deposit. 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 Metals carried out 415 m of geotechnical drilling, collected geotechnical data and have ongoing engineering and metallurgical studies to advance the project to the pre-feasibility level.

8.5.2. North Central Region

FPX Nickel Corp. reported an updated mineral resource estimate (MRE) for their **Decar Nickel District** project's Baptiste deposit and carried out diamond drilling at the Van target approximately 6 km north of Baptiste. The updated MRE reported a 6% davis tube recoverable (DTR) nickel increase in the Indicated category and a 15% increase in the Inferred category. The report also included DTR cobalt and DTR iron grades. Indicated resources are now reported as Indicated 1815 Mt grading 0.129% DTR Ni, 0.211% total Ni, 0.0035% DTR Co, and 2.40% DTR Fe, and Inferred 339 Mt grading 0.131% DTR Ni, 0.212% total Ni, 0.0037% DTR Co, and 2.55% DTR Fe. At the Van target, 2504 m of drilling was completed in ten holes. Holes were spaced to test along strike from the initial 2021 discovery area. Nickel mineralization was in all holes, and highlight assays included 346.3 m grading 0.133% DTR Ni and 334.5 m grading 0.12% DTR Ni. Drilling expanded mineralization along strike for 1 km and the area of mineralization is now defined as extending for 2 km along strike and 1 km across. Mineralization is open both laterally and at depth.

Surge Battery Metals Inc.'s Surge Nickel project consists of two claim blocks separated by about 40 km, **Surge Nickel** (HN4) and **Surge Nickel** (N100). At HN4 Surge carried out geological mapping and sampling (600 soil, 190 rock). In the fall, the company began a planned 900 m of diamond drilling of which 300 m was completed by early November. At N100, Surge carried out geological mapping and collected 304 rock samples.

8.5.3. South Central Region

The **Beaver** and **Lynx** projects are on linked properties in the Cache Creek complex; Mg-Ni-Cr-Co mineralization is targeted at the Beaver and Ni mineralization at the Lynx. Inomin Mines Inc. reported results of 2021 drilling at the Beaver and conducted a ground magnetic survey at the Lynx. They expanded both properties. A highlight of drilling included

252 m grading 20.6% Mg, 0.16% Ni, 0.33% Cr at Beaver. They used a sodium peroxide digestion intended to discriminate between sulphide and silicate Ni.

Blackstone Minerals Limited reported 2021 results from its **Gold Bridge** project. They reported 81 m grading 0.21% Ni at the Western Gem prospect and 0.9 m grading 1.45% Cu, 0.56% Ni, and 0.19% Co at the Jewel prospect. They also reported conducting reconnaissance prospecting and geophysical modelling.

Green River Gold Corp. was active at its **Quesnel Nickel** project with portable drilling and remotely piloted aircraft-based magnetic surveys. They report initial Mg, Ni, and Cr results including 79 m grading 20.1% Mg, 0.177% Ni, 0.138% Cr, and 0.01% Co. Metallurgical analyses were in process.

8.6. Selected Nb, REE, Ta, Ti, and graphite projects 8.6.1. North Central Region

Defense Metals Corp.'s Wicheeda project is a deformed carbonatite intrusion that hosts light rare earth elements (LREE) in the Kechika Group. The core of the intrusion is a dolomite carbonatite, which transitions outward to a calcite carbonatite. Hydrothermal veins and plugs in the dolomite carbonatite are mineralized with REE flourocarbonates, ancylite (cerium, lanthanum) and monazite (cerium, lanthanum, neodymium). Minor concentrations of niobium are also present. Defense Metals completed 4357 m of diamond drilling in 18 holes, 1153 m of geotechnical drilling as part of a resource delineation and pit geotechnical program (Fig. 6) and conducted flotation tests. Drilling results consistently demonstrated continuity of mineralization and high-grade results including 124 m grading 3.58% total rare earth oxides (TREO) were reported. The deposit consists of three main rock types, dolomite carbonatite (73%), xenolithic carbonatite (24%), and syenite (3%). Flotation tests on dolomite carbonatite and composite samples produced a high-grade mineral concentrate with more than 40% TREO at a recovery.

8.6.2. Southeast Region

Eagle Plains Resources Ltd. completed silt sampling, geological mapping, channel sampling, and mineralogical studies at their **Adamant** project. REE mineralization at Adamant (previously known as Trident Mountain) is in a nepheline syenite and carbonatite dike system. The Late Devonian dikes intrude psammatic and kyanite-bearing pelitic schists of the Horsethief Creek Group (Neoproterozoic). At their **Ice River** project, Eagle Plains Resources Ltd. completed mapping and rock and soil sampling in both areas of known REE mineralization and at previously identified exploration targets. Limestone of the Ottertail Formation (Cambrian) is cut by nepheline syenite of the Ice River complex (Devonian or Carboniferous).

Aben Resources Ltd. carried out property-wide field reconnaissance, geological mapping, soil and rock sampling program at their **Slocan Graphite** project. Graphite mineralization is hosted primarily in carbonate and cale-silicate

rocks in the Passmore dome of the Valhalla metamorphic complex. Based on field observations, the company staked additional claims to expand the property.

Lithium Corporation completed a small program of hand trenching and prospecting at their **Yee Haw** project's titanium-REE showings related to lamprophyric dikes previously examined in 2017. The property appears to be underlain by Eocene rocks of the Coryell intrusion, including syenites, quartz-poor monzonites, and granodiorites.

9. The British Columbia Geological Survey

Headquartered in Victoria, the British Columbia Geological Survey (BCGS) is part of the Ministry of Energy, Mines and Low Carbon Innovation. As the steward of geoscience and mineral resource information in the province, the Survey has role in stimulating mineral exploration, attracting investment, informing decisions with technical information, and providing continuous research based on more than a century of corporate memory. The Survey is the primary repository for provincial geoscience knowledge. Maps, reports, and databases are freely available online and are public resources for First Nations and stakeholder groups including local communities, the minerals industry, public safety agencies, environmental scientists, research organizations, and government agencies (Fig. 12).

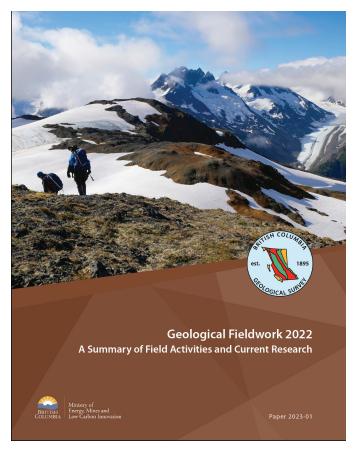


Fig. 12. Geological Fieldwork contains peer-reviewed papers that summarize field activities and current research by the British Columbia Geological Survey.

Current research programs continue to define the geological evolution and natural resources of the province, generating knowledge and data to support land use and resource management decisions that balance economic, environmental, and community interests. A particular focus is providing public geoscience to support the growth of British Columbia as a competitive jurisdiction for mineral exploration, boosted by the recent attention of policy makers and industry to critical minerals. By connecting government with the minerals industry and local communities, the Survey supports the growth of British Columbia as a competitive jurisdiction for mineral exploration.

The Survey enjoyed a more extensive summer field program in 2022 than in the two previous years, thanks to relaxations in pandemic health restrictions and a less dramatic wildfire season. A multi-year program to expand regional bedrock mapping and better understand the stratigraphic, magmatic, structural, metallogenic, and tectonic framework of northern British continued with mapping in the Kitsault River are, near the Galore Creek deposit, and in the Toodoggone region. In the southern part of the province, mapping of the Lardeau Group in the Kaslo area continued, focussed on the age, stratigraphic position, and tectonic significance of the Index Formation, which contains previously unmapped ultramafic layers and pods (now talc and chromian mica schists) with massive sulphide mineralization. Also, a study to investigate the relationships between the Harper Ranch (Devonian-Carboniferous), Slocan Group (Triassic), and Nicola Group (Triassic) and potential affiliations with the Chase Formation (Devonian) started in the Trinity Valley area near past-producing mines. Continuing a project started in 2021, remotely piloted aircraft systems (RPAS, or 'drone') were deployed for geophysical surveys in the Woodjam, Mount Polley, and Highland Valley areas. These surveys demonstrate the practical application of drone-mounted radiometric, aeromagnetic, and lidar instrumentation at a local scale. Data will be used to evaluate geochemical dispersal in glacial tills as an exploration tool to delineate buried deposits in drift-covered areas.

The Government of British Columbia continues to act on climate change. As part of the CleanBC Road Map to 2030, the Survey has been deployed to assess the potential contributions that the province can make supplying critical minerals, the commodities that are essential for diverse modern technologies, electrification, and low-carbon energy. The province is also pursuing a critical mineral strategy that will feature next-generation geoscience directed at better understanding the critical mineral endowment of the province. The Survey has embarked on a multi-year project to assess critical mineral deposits and associated mineral systems across the province and is preparing an inventory of British Columbia's critical minerals, assessing geological settings most favourable to host deposits, and developing exploration techniques that would enhance discovery of new deposits. Modernized mineral potential modelling identifies areas of high prospectivity for key mineral systems. Mineral potential assessment continues as a renewed focus for the Survey, with an emphasis on supporting government, First Nations, and stakeholders in land-use planning and policy development. A pilot study, which produced data-driven mineral potential maps for three mineral systems (VMS, porphyry copper, magmatic nickel), now continues into new areas and will be applied to the Survey's province-wide critical minerals assessment.

The provincial Sample Archive is home to rock, mineral, and geochemical samples collected from across the province by BCGS staff and partner organizations. This collection represents a valuable resource for public geoscience, supporting quality control of published data, re-analysis using modern comprehensive and high-precision analytical methods, and new geoscience initiatives. Following a notice to vacate the historic BCGS storage facility, systematic sorting, rationalizing, and cataloguing of archived samples was undertaken before the move to its newly constructed home in the basement of Survey headquarters at 1810 Blanshard Street in Victoria. Work will continue to make the Archive a modern and reliable resource supporting Cordilleran geoscience with enhanced and accessible digital cataloging.

The Resource Information Section continues to regularly update geoscience databases, including MINFILE, COALFILE, Property File, and the Assessment Reports Indexing System (ARIS). As part of transformation efforts to improve digital capabilities, the Survey is modernizing core information systems to increase efficiency in updating databases and delivering services.

The Survey is an organization in transition. Faced with retirements, positions vacated by staff pursuing other opportunities, and the need to fill newly created positions, the Survey began an aggressive hiring program. Capacity building in areas such as critical minerals, field mapping, digital data delivery, geomatics, and mineral potential modelling will continue in 2023. Similarly, capacity building for enhancing engagement with First Nations before, during, and after future field seasons will remain a priority.

10. Foreign investment initiatives

Opportunities exist for companies to attract foreign investment using government services and staff. The province participates in international investment missions showcasing mineral and coal opportunities. If you are interested in profiling your projects or investment opportunities in upcoming events, connect with the Mineral Development Office in Vancouver for more information.

11. Concluding remarks

The forecasted value of total provincial mining production reached an all-time high of \$18.2 billion, and total exploration expenditures reached a record of \$740.4 million. High mining production was due to high metallurgical coal prices.

New discoveries, excellent exploration results, and acquisitions and earn ins confirm British Columbia's reputation as a premier jurisdiction for mineral exploration and mine

development opportunities. The province continues to attract investment by large multinational mining companies. In recent years we have seen large investments by Newcrest Mining Limited and Newmont Corporation. This year Freeport-McMoRan Inc., Hochschild Mining PLC, Boliden AB, and Antofagasta PLC have invested in British Columbia projects.

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