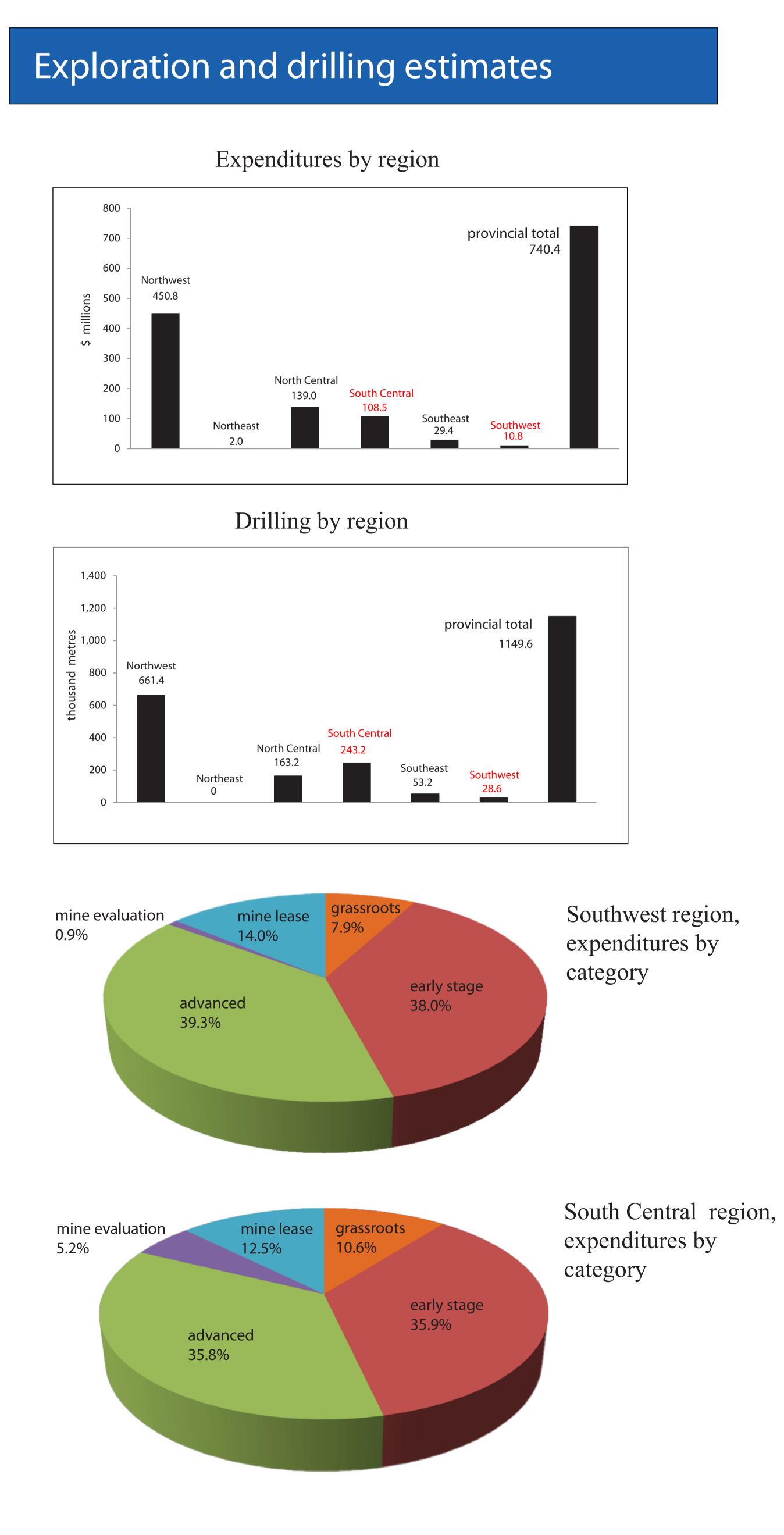


# Exploration and mining highlights, Southwest and South Central regions, 2022

#### Overview

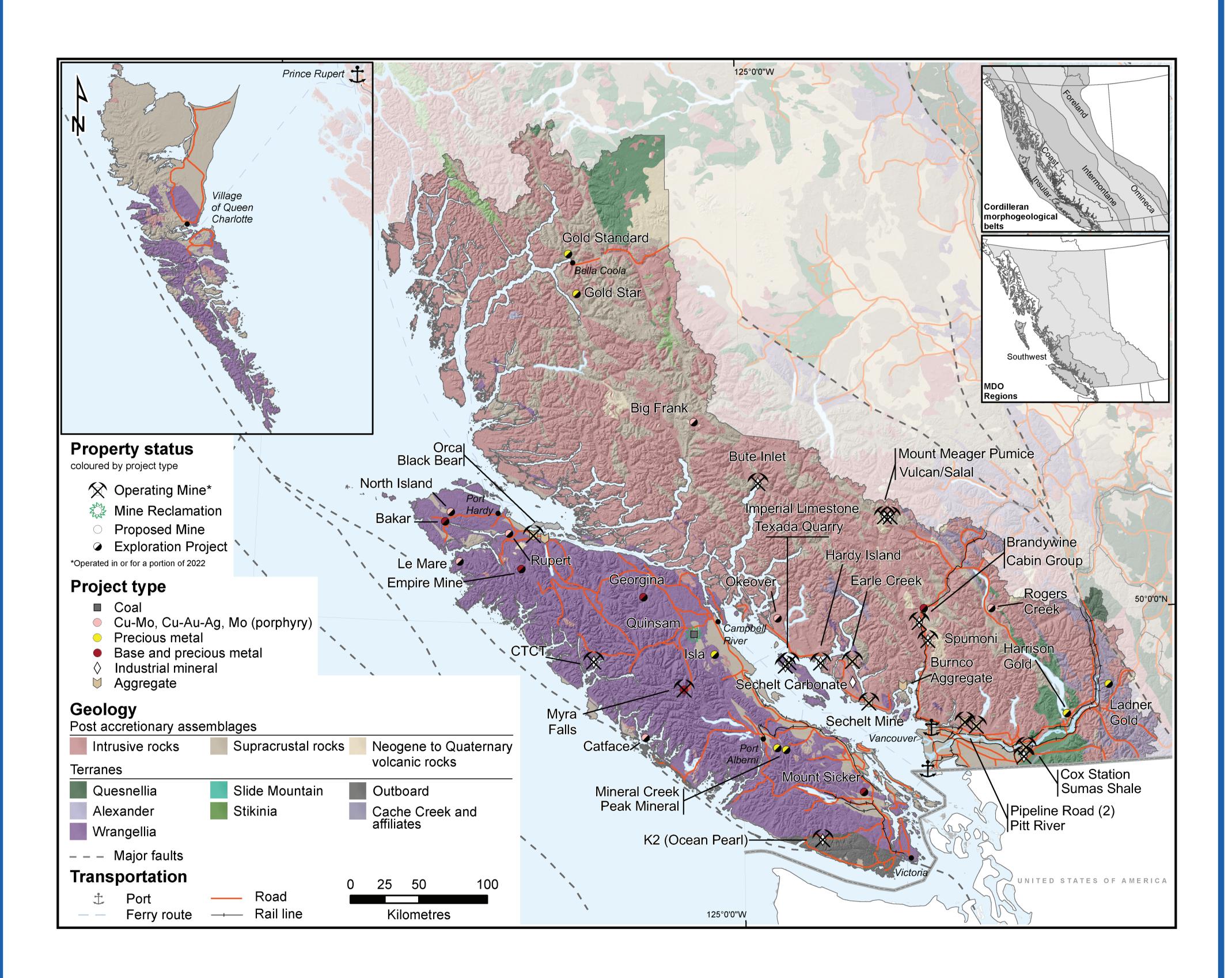
The exploration and mining industries of the adjacent Southwest and South Central mining regions reflect their differences in geography, geology, economy and population. The South Central region hosts an extraordinarily productive copper mining district, with five major bulk-tonnage copper porphyry mines after the re-start of Mount Polley in the summer of 2022. The Southwest currently has one major metal mine (Myra Falls, a higher grade polymetallic deposit), but many areas are underexplored by modern methods. The region also has numerous aggregate and industrial mineral operations serving local, growing population centres and other coastal markets.

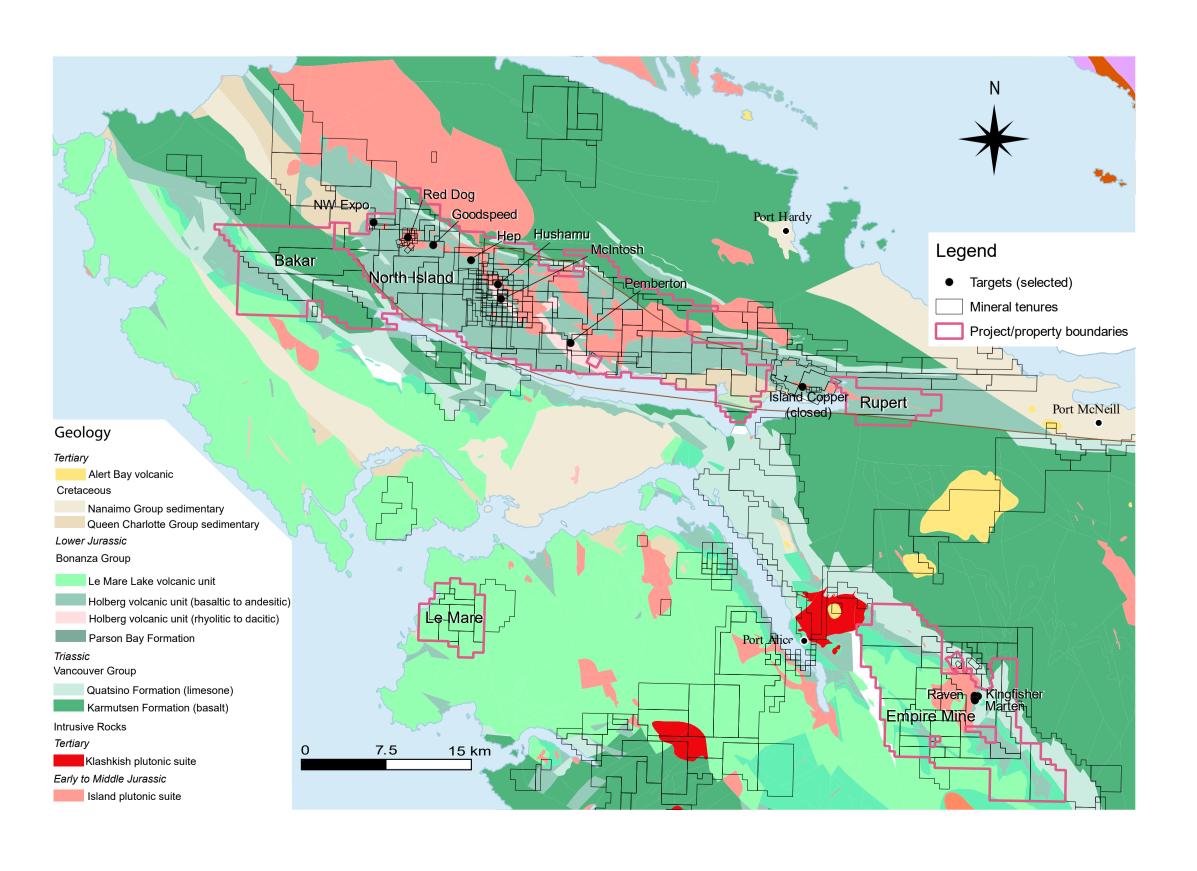


### Mines and selected projects, Souththwest Region

The Southwest Region, with its large population centres and real-estate driven economy, has a high demand for construction aggregates and industrial minerals important to the construction industry. For many of the largest operations, rivers and tidewater facilitate transportation of these low unit value commodities.

With some exceptions such as the Middle Jurassic Island Plutonic Suite of northern Vancouver Island, the Southwest Region lacks the porphyry copper potential of the southern Quesnel terrane of the South Central Region. Younger porhyry and epithermal prospects are known, but generally at earlier stages of development. Consequently, gold, porphyry copper potential and other opportunities in the region are perhaps overlooked.



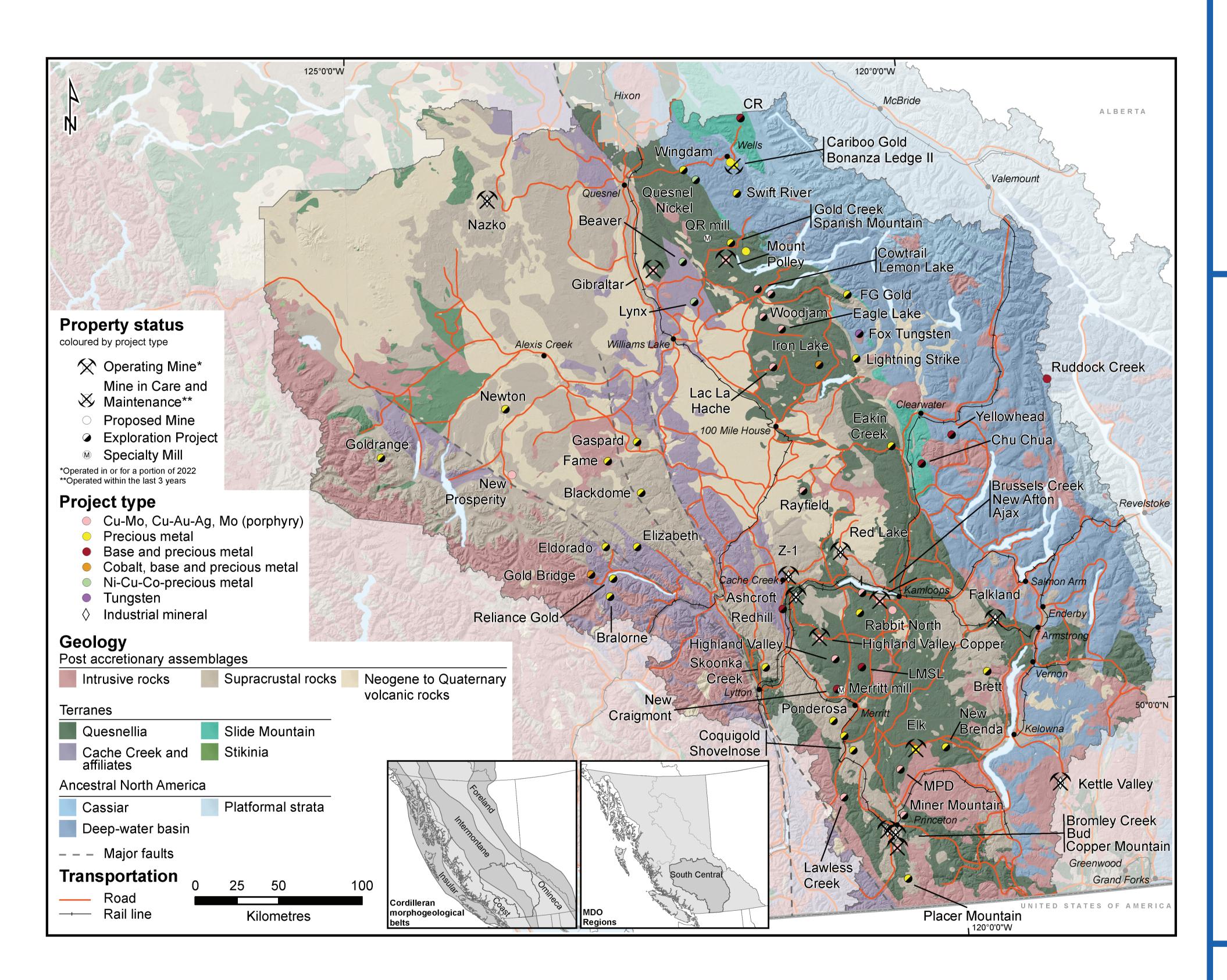


Northern Vancouver Island projects reported on in 2022. Geology after Nixon et al. (2011)

### Mines and selected projects, South Central Region

The southern Quesnel terrane is a productive copper porphyry district, with the Gibraltar, New Afton, Highland Valley Copper and Copper Mountain mines currently producing and the Mount Polley mine in the early stages of a planned re-start. Several projects targeted porphyry copper-gold  $\pm$  molybdenum  $\pm$  silver mineralization.

There were many projects targeting gold. Among the largest were the Cariboo Gold, Bralorne and Shovelnose projects. As in 2021, gold projects dominated spending.





Copper Mountain's concentrate loadout facility. Photo credit Copper Mountain Mining Corporation

## **Exploration highlights**

**Bralorne (orogenic gold veins; Talisker Resources Ltd.)** Talisker Resources continued to drill at Bralorne (over 38,000 m) with the objective of developing a new resource estimate. High grade vein intersections include 1.3 m grading 42.61 g/t Au within a 3.7 m interval grading 15.51 g/t

**Cariboo Gold (orogenic gold veins; Osisko Development Corp.)** Osisko Development completed a feasibility study. The mine would have 12 year life based on an initial Probable reserve of 16.7 Mt grading 3.78 g/t Au (2.03 Moz Au The project is in the effects assessment stage of the BC environmental assessment process with a revised application accepted for review.

Elizabeth (orogenic gold veins; Tempus Resources Ltd.) Tempus Resources drilled 9760 m in 40 holes. Initial results include 28.5 m grading 28.1 g/t Au, 0.92 m grading 23.5 g/t Au, 2.11 m grading 87.0g/t Au.

MPD (porphyry copper-gold; Kodiak Copper Corp.) Kodiak drilled 26,103 m in 41 holes at the Gate, Prime and Dillard targets. Highlight results at the Gate zone include 117 m grading 0.69% Cu, 0.46 g/t Au and 2.22 g/t Ag within 735.4 m 0.24% Cu, 0.14 g/t Au and 0.71 g/t Ag. They also reported a surface gold-silver discovery, the Beyer zone, including 12 m grading 3.02 g/t Au and 24.18 g/t Ag.

North Island (porphyry copper-gold-molybdenum; Northisle Copper and Gold Inc.) Drilling, mapping and ground-based geophysics included several targets along a >20 km WNW trend, including the NW Expo at the western extent of the trend where positive results of 2021 drilling were announced early in 2022. Step out drilling in 2022 extended mineralization at depth beyond the Hushamu pit design area.

**Reliance (orogenic gold veins; Endurance Gold Corporation)** Endurance Gold completed 8,274 m of diamond drilling in 38 holes and 2,455 m of reverse circulation drilling in 33 holes at the Reliance project. Drilling focused on the Eagle zone and interpreted feeder structures. A highlight result from the southeast extent of the Eagle zone was 139.9 m grading 3.05 g/t Au including 12.9 m 12.85 g/t Au and 11.8 m grading 6.21 g/t Au.

Shovelnose (epithermal gold-silver veins; Westhaven Gold Corp.) Westhaven Gold drilled approximately 40,000 m in 100 holes. Targets extended to zones along an approximate 3 km northwest trend, the FMN and Franz zones, with a focus on the FMN. Highlights included 14.96 m 5.69 g/t Au and 343.57 g/t Ag. They also reported a gold discovery north east of the South zone resource area.

### Mining highlights

Copper Mountain (Cu-Au porphyry) increased its Proven and Probable reserve estimate by 57% to 702.4 Mt 0.24% Cu, 0.10 g/t Au and 0.71 g/t Ag. This would support a 32 year mine life, including an increased rate of mill throughout to 65,000 tpd in 2028. Measured and Indicated resources, inclusive of reserves, are 1.13 Bt 0.22% Cu, 0.09 g/t Au and 0.64 g/t Ag. The update follows several years of

New Gold Inc. reported underground exploration at New Afton (Cu-Au porphyry), and surface exploration at Cherry Creek to the west and a reconnaissance program to the southwest. They obtained a permit amendment to allow mining of the C-Zone which is to be mined in the second half of 2023. Production in 2022 was 41,551 oz Au and 31.1 Mlb Cu.

Production resumed at Imperial Metals Corporation's Mount Polley (Cu-Au porphyry), with approximately 2.4 Mlb Cu produced during Q3, its first quarter of ramp-up milling operations.

Taseko Mines Limited updated its Proven and Probable reserve estimate at Gibraltar (Cu-Mo porphyry) to 706 million tons 0.25% Cu and 0.008% Mo, a 40% increase. The mine now has a projected life of 23 years with 3 billion lb recoverable Cu and 53 million lb Mo. Production in 2022 was 97 million lb Cu plus by-product

Teck Resources Limited's HVC 2040 project at Highland Valley Copper (Cu-Mo porphyry) is in the application development and review phase of the BC environmental assessment process. The project would extend the mine life to at least 2040 (from 2028 to approximately 2042) and enable mining of an additional 800 Mt of

Trafigura Mining Group's Myra Falls (Zn-Cu-Pb-Ag-Au VMS) continued to ramp up production. The long-term target is a throughput of 800,000 t of ore per year. Exploration continued in 2022 to replace reserves, which are currently estimated to last over 10 years.

### Further information

Clarke, G., Northcote, B., Corcoran, N.L., Heidarian, H., and Hancock, K., 2023. Exploration and Mining in British Columbia, 2022: A summary. In: Provincial Overview of Exploration and Mining in British Columbia, 2022. British Columbia Ministry of Energy, Mines and Low Carbon Innovation, British Columbia Geological Survey Information Circular 2023-01, pp. 1-48.

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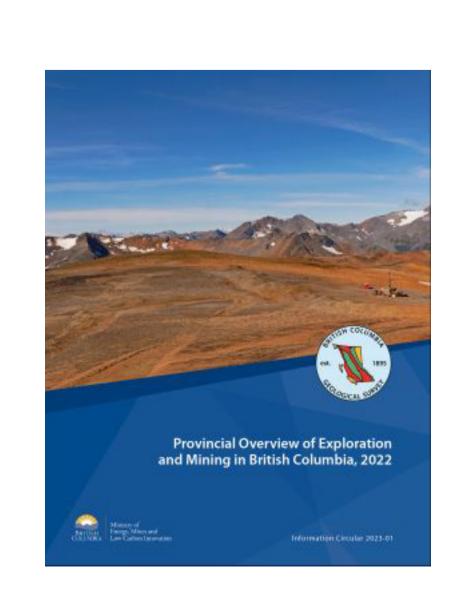
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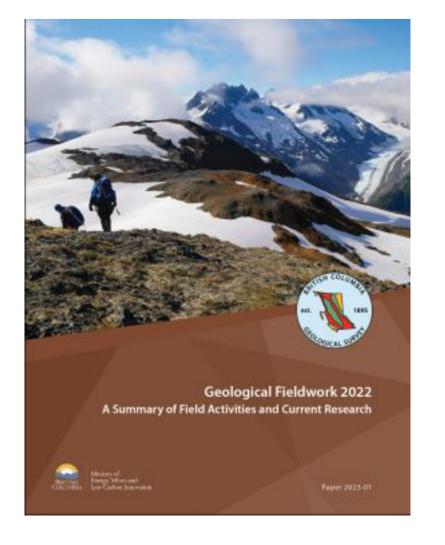
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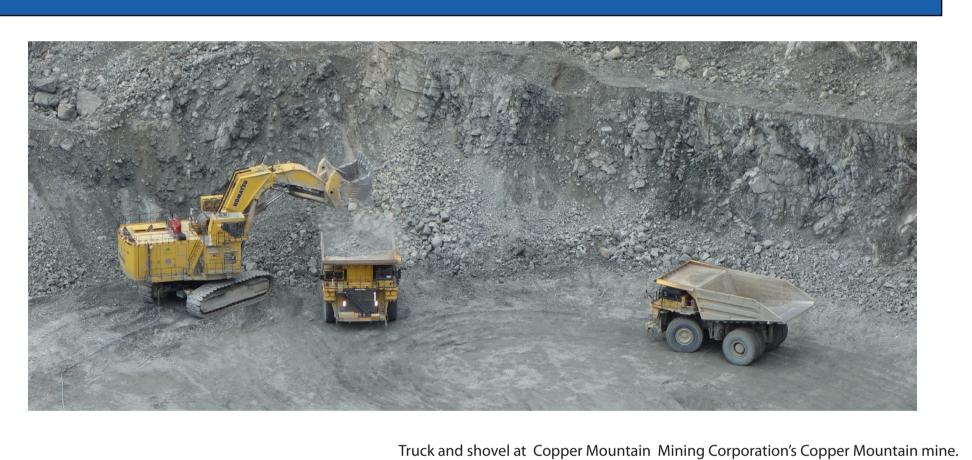


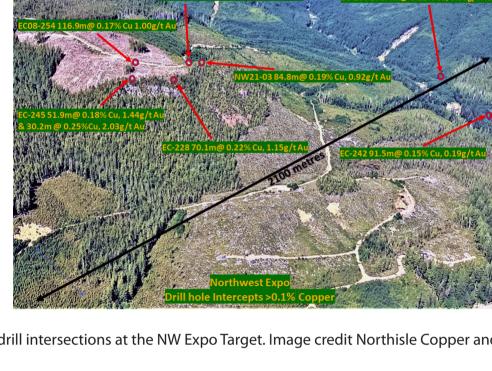
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hland Valley Copper's proposed HVC 2040 expan





mi-massive chalcopyrite (+pyrite+magnetite) from Kodiak Copper Corp.'s MPD proje



of a sample grading 16 g/t Au from a hole targeting Eagle zo rance Gold Corporation's Reliance projec