

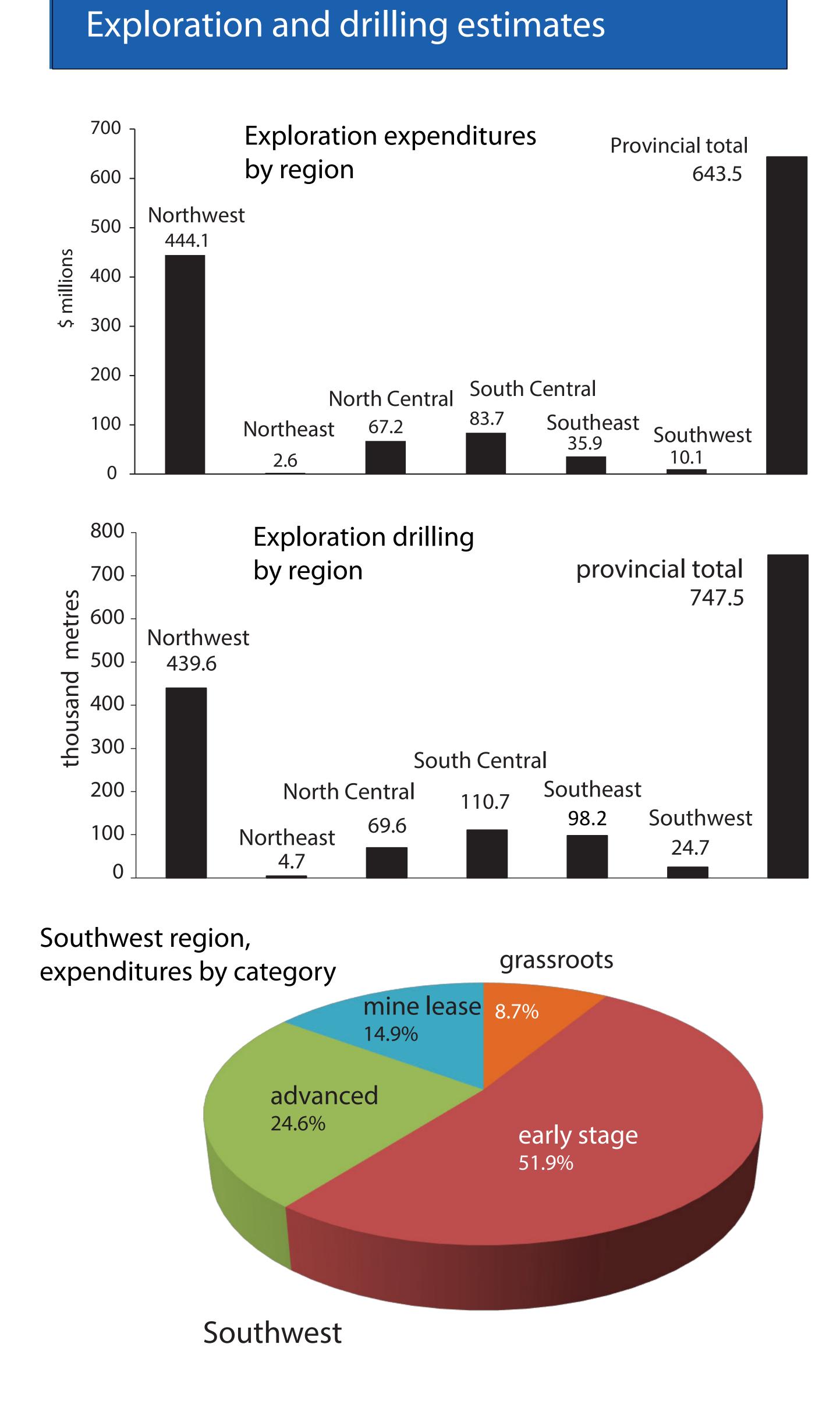
Exploration and mining highlights, Southwest Region, 2023

Overview

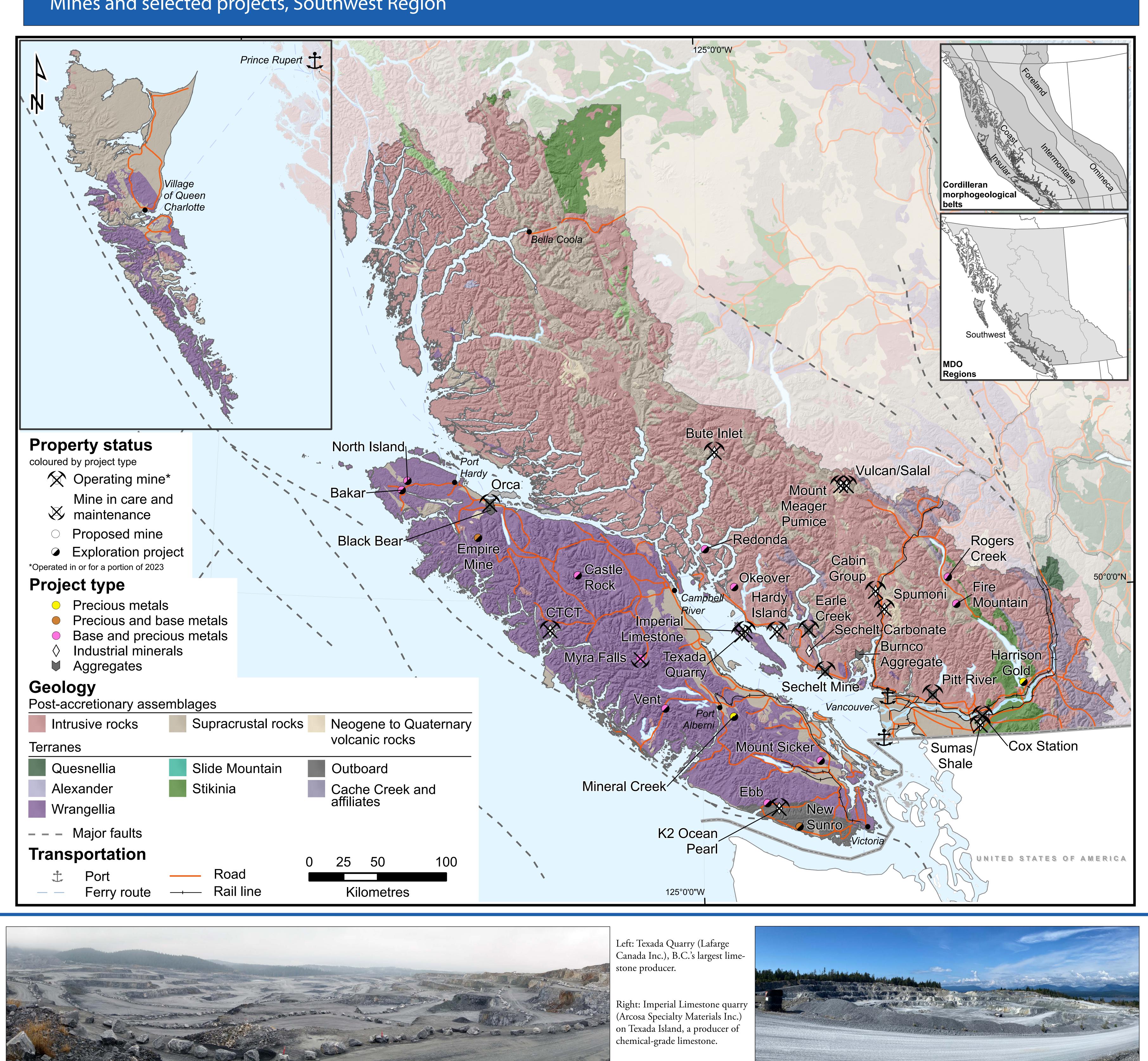
With its large population centres, real estate, and construction-driven economy, the Southwest Region's mining industry mostly serves coastal markets with construction aggregates and limestone. For many of the largest operations, rivers, and tidewater facilitate the transportation of these low-unit-value commodities.

Myra Falls, an underground Zn-Cu-Pb-Ag-Au producer was the single operating major metal mine in 2023 but was placed on care and maintenance at the end of the year because of high operating costs and falling metal prices.

The largest exploration projects targeted porphyry mineralization on northern Vancouver Island, VMS mineralization at the Myra Falls camp, and gold veins at Mineral Creek. In recent years, the most significant metal exploration has targeted porphyry and skarn mineralization generated by the Island Plutonic Suite (Jurassic) and VMS mineralization in the Sicker Group (Devonian), but there are other less well-known targets such as that related to Tertiary intrusions, orogenic gold veins, and mafic intrusions.



Mines and selected projects, Southwest Region



Exploration highlights

Northisle Copper and Gold Inc.'s North Island project was the largest in the region in 2023 with 11,000 m in 25 holes on targets spanning 20 km on the large property north Holberg Inlet (Fig. B). Most drilling targeted Northwest Expo, a gold-rich zone at the western edge of the property. Highlights at Northwest Expo include 130 m grading 1.65 g/t Au, 0.33% Cu, 0.006% Mo, 0.16 g/t Re, including 72 m 2.22 g/t Au, 0.41% Cu, 0.003% Mo and 0.15 g/t Re. Other targets included Goodspeed, Pemberton Hills and Hushamu The program included ground magnetic surveys, mapping, alteration studies, and geochronogy.

Arcwest Exploration Inc. began a 3D induced polarity survey at its Teeta Creek project, which together with its NVI project, covers the northeastern portion of the Klashkish Plutonic Suite, a northeast-southwest trending series of Neogene felsic intrusions between the Klashkish River area and Alert Bay with related Cu-Mo mineralization.

At the **Empire Mine** project, Coast Copper Corp. is targeting skarn and replacement mineralization around the Merry Widow and Old Sport past producers where an Early Jurassic mafic phase of the Island Plutonic suite intrudes Vancouver Group and Bonanza Group sedimentary rocks, limestone and volcanic rocks. Highlights included an updated resource estimate and identification of new targets through prospecting, geology, and geochemistry.

On the inner coast (Fig. D), Stamper Oil and Gas Corp. funded drilling at the Redonda Cu-Mo porphyry target and Alpha Copper Corp. reported results of late 2022 drilling at the Okeover project. These are hosted by Jurassic-Cretaceous Coast Plutonic complex intruded by younger, possibly Miocene, felsic intrusive rocks. Other occurrences in the area include Hi-Mars and Don.

Theia Gold Corp. drilled at the Mineral Creek gold project in 2023 (Fig. A). In December, Karus Gold Corp. announced a plan to amalgamate with Theia Gold.

Bear Mountain Gold Mines Ltd. rehabilitated underground workings at Harrison Gold and tested an optical ore sorting process on its ore. The ore consists of quartz-pyrrhotite veins in relatively unmineralized, unaltered wall rock (Fig. C)

Mining highlights

Myra Falls (Myra Falls Mine Ltd., Trafigura Mining Group, Trafigura Group Pte.)

The Myra Falls polymetallic (Zn-Cu-Pb-Ag-Au) mine has operated since 1966 with several suspensions, the latest beginning in September 2023. The company indicates the operation is not currently financially viable and foresees a long-term shutdown. The operating company has obtained creditor protection and plans to undergo restructuring. The company attributed its insolvency to rising operating costs and falling metal prices, particularly zinc, which fell over 20% during 2023 and 40% from a 2022 peak.

Exploration has been ongoing for several years. Over 30,000 m of drilling in 2023 included infill and expansion designed to upgrade and add to resources. The mine recently operated with a projected 10- year life and a target throughput of 800,000 tpy, with infrastructure upgrades since its last closure in 2015-2018. It has had a history of replacing reserves through exploration.

Quarries

Industrial minerals and aggregate quarries operated by private or very large multinational companies do not typically release production figures for individual operations. However, unofficial estimates suggested generally steady production in 2023 like previous years. There has been a multi-year trend toward consolidation of operations by large multinational materials corporation

Further information

Clarke, G., Northcote, B.K., Corcoran, N.L., Pothorin, C., Heidarian, H., and Hancock, K., 2024. Exploration and mining in British Columbia, 2023: A summary. In: Provincial Overview of Exploration and Mining in British Columbia, 2023. British Columbia Ministry of Energy, Mines and Low Carbon Innovation, British Columbia Geological Survey Information Circular 2024-01, pp. 1-53.

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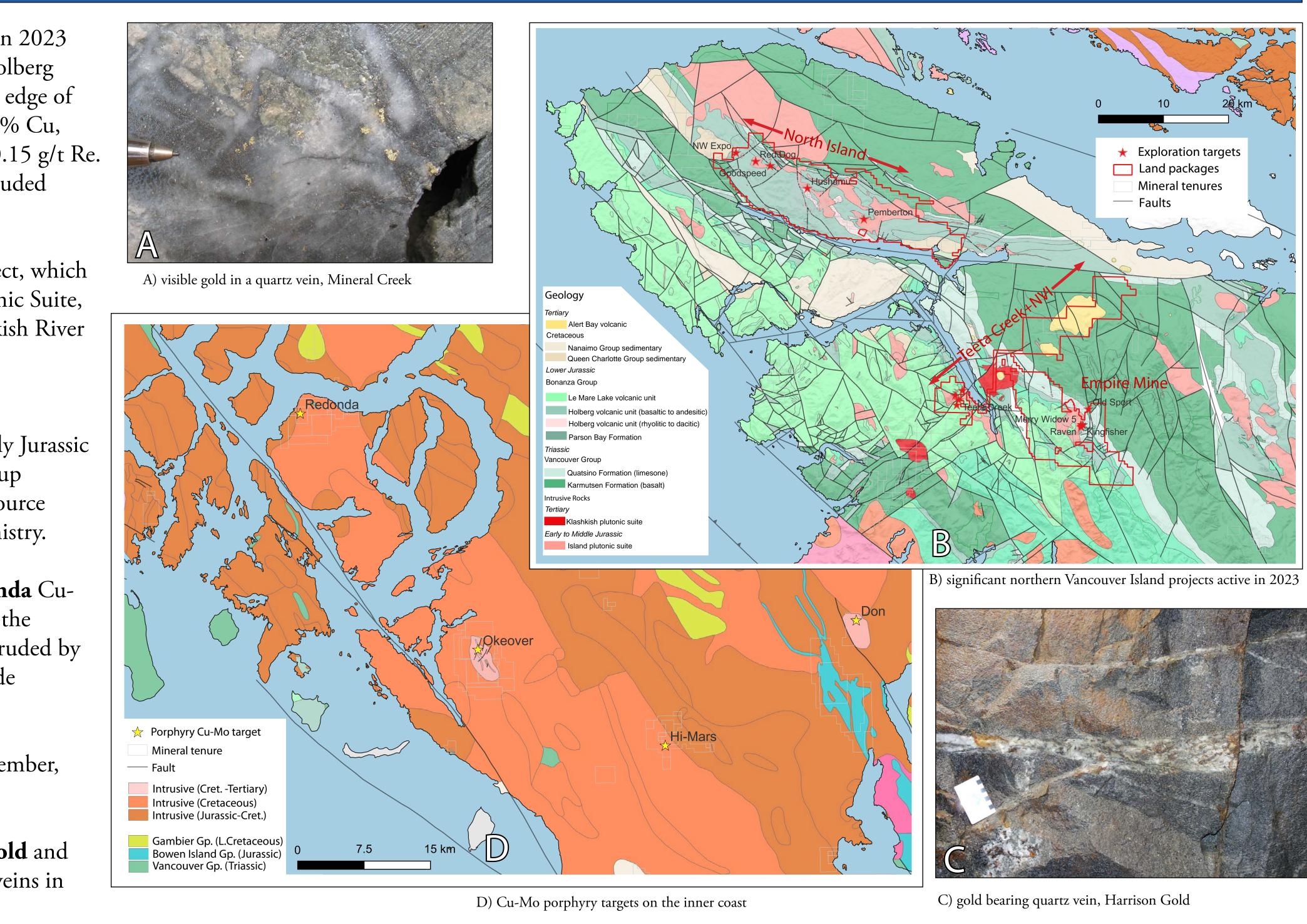
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Interlayered sphalerite and chalcopyrite ore in a stope at Myra Falls.

The Orca sand and

gravel quarry (Polaris

Materials Corporation)



