



## MINFILE NTS 092K - BUTE INLET

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The Bute Inlet map area contains 162 recorded mineral occurrences and covers part of the south coastal mainland and adjacent islands and part of northeast Vancouver Island.

The mainland and most of the islands lie within the Coast Crystalline belt. This area is notable for its narrow northwest trending belts of Paleozoic and/or Triassic metavolcanic and metasedimentary rocks which are separated by broader areas of quartz diorite and granodiorite of the Mesozoic Coast Plutonic Complex. The Vancouver Island part of the map area lies within the Insular belt and is underlain primarily by Upper Triassic Vancouver Group rocks which are intruded by several large stocks of quartz diorite of the Jurassic Island Intrusions.

The map area is historically well known for many past producers, primarily on Quadra Island and the Phillips Arm area. Significant mineral occurrences in the Phillips Arm area comprise the **Alexandria** (092K 028), **Enid-Julie** (092K 024) and **Doratha Morton** (092K 023) past producers, which have received recent exploration activity. Precious metals occur in a quartz-veined and silicified shear zone along a contact between a band of metamorphosed rocks and the Coast Plutonic Complex.

The Coast Plutonic Complex hosts polymetallic quartz veins, porphyry copper-molybdenum mineralization and is known for its building stone and dimension stone potential. The **Loughborough** (092K 048) and **Hope** (092K 018) historically produced gold, silver and copper from quartz veins. The **OK** deposit (092K 008) hosts a possible resource of 68 million tonnes of 0.39 per cent copper and 0.02 per cent molybdenum. The **Knight Inlet Granite** quarry (092K 140) was opened in 1985 and has operated intermittently since.

The Upper Triassic Vancouver Group, consisting of Karmutsen Formation volcanic rocks and Quatsino Formation limestone, hosts skarn mineralization near contacts with Mesozoic intrusions, volcanogenic disseminated copper mineralization in pillow lavas, and hydrothermal veins. The **Iron Mike** (092K 2) and **Lucky Jim** (092K 043) past producers are skarn deposits and produced iron, copper, gold and silver. The **Copper Road** (092K 062) and **Pomeroy deposits** (092K 071,072,119) produced copper from disseminated and vein mineralization in pillow lavas.

Limestone quarries are widely distributed throughout Vancouver Group rocks, predominantly in the Quatsino Formation. Brucite occurs within zones in some limestones.

Exploration potential remains high in the map area.

## SELECTED REGIONAL REFERENCES (NTS 092K - BUTE INLET)

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