

MINFILE NTS 103B & C – MORESBY ISLAND

Original release date: April 1989, updated November 1999 Researched and compiled by: L.D. Jones, P.S. Fischl, J.N. Rouse, L.L. Duffett

This map area covers the southern part of the Queen Charlotte Islands and contains 82 recorded mineral occurrences. The area lies within the Insular Belt and is underlain primarily by various Triassic to Cretaceous strata of the Wrangellia Terrane, which are intruded by the Jurassic Burnaby Island and San Christoval plutonic suites and the Tertiary Kano Plutonic Suite.

The region is host to numerous iron and copper skarn deposits hosted in mafic volcanics of the Upper Triassic Karmutsen Formation (Vancouver Group) and overlying limestone of the Upper Triassic Sadler Formation (Kunga Group) proximal to intrusions of the Burnaby Island Plutonic Suite. The only significant mineral production in the Queen Charlotte Islands has been from these skarn occurrences.

The skarn-type **Tasu** (103C 003) deposit located in the northwest corner of the map-area produced (1914-1984) over 12 million tonnes of iron, 1 million grams of gold, 50 million grams of silver and 59 million kilograms of copper from about 21 million tonnes. The skarn-type **Jessie (Jedway)** (103B 026), **Adonis** (103B 027) and **Rose** (103B 029) orebodies, located in the southeast part of the map-area, produced about 2 million tonnes of iron from 3.7 million tonnes mined. Numerous small skarn replacement, vein and massive type deposits have also been mined. Other important prospects include **Iron Duke** (103B 001), **Jib** (103B 020), **Magnet** (103B 034) and **Thunder** (103B 041) deposits.

SELECTED REGIONAL REFERENCES (NTS 103B & C – MORESBY ISLAND)

- Geological Survey of Canada (1991): Current research, Part A: Cordillera and Pacific Margin, Geological Survey of Canada, Paper 91-1A.
- Geological Survey of Canada (1990): 103B, C, Moresby Island, British Columbia, GSC Map 2-1990, Scale 1:250 000.
- Geological Survey of Canada (1990): Current research, Part F; Frontier Geoscience Program: Cordilleran and offshore basins, British Columbia, Geological Survey of Canada, Paper 90-1F.
- Geological Survey of Canada (1989): Current research. Part H; Frontier Geoscience Program, Queen Charlotte Islands, British Columbia, Geological Survey of Canada, Paper 89-1H.
- Geological Survey of Canada (1988): Current research Part E; Cordillera and Pacific margin of Canada, Geological Survey of Canada, Paper 88-1E.
- Haggart, J. W (1986): Stratigraphic investigations of the Cretaceous Queen Charlotte Group, Queen Charlotte Islands, British Columbia, Geological Survey of Canada, Paper 86-20.
- Lefebure, D.V. (1998): Epithermal Gold Deposits of the Queen Charlotte Islands, BC Ministry of Energy and Mines, Geological Fieldwork 1997, pp. 19-1 19-14.
- Sutherland Brown, A. (1968): Geology of the Queen Charlotte Islands, BC Ministry of Energy Mines and Petroleum Resources, Bulletin 54.
- Woodsworth, G.J. (editor) (1990): Evolution and hydrocarbon potential of the Queen Charlotte Basin, British Columbia, Geological Survey of Canada Paper 90-10.