

## MINFILE NTS 092M & 102P – RIVERS INLET & QUEENS SOUND

Original release date: May 1992

Researched and compiled by: C.J. Rees and P.S. Fischl

The Rivers Inlet and Queens Sound map areas, located on the western edge of the Coast Mountains in the Coast tectonic belt in southwestern British Columbia, 360 kilometres northwest of Vancouver, contain 19 documented mineral occurrences. The area is very mountainous and has not been explored thoroughly. Access to the interior is provided mainly by the extensive fiords. With one exception, all the documented mineral occurrences are either on the coast or on fiord shorelines.

The map area is underlain by the Coast Plutonic Complex, a heterogeneous assemblage of gneissic, migmatitic and plutonic rocks of mainly Jurassic to Tertiary, and locally Paleozoic age. Granodiorite, quartz diorite, and diorite are the most common compositions, with lesser amounts of quartz monzonite, gabbro, and amphibolite. Metamorphic rocks are generally at amphibolite grade. Upper Triassic and Lower Cretaceous volcanic and sedimentary rocks in the extreme northeast of the area belong to Stikinia terrane, on the northeastern margin of the Coast belt. Farther southwest, narrow belts of Lower Cretaceous volcanic rocks within the igneous and metamorphic rocks are related to the Wrangellia terrane.

Ten of the 19 mineral occurrences are based on one of two commodities: limestone-marble, and iron in the form of magnetite. The limestone or marble commonly forms bands or roof pendants in igneous or metamorphic rocks, and is generally of high purity. Deposits such as the **Koeye River** (092M 012) and **King Island** (092M 013) occurrences have been quarried for use in pulp mills elsewhere on the coast. At the **Kitchener** (092M 001) and **Alexander** (092M 002) occurrences, the magnetite forms massive aggregates or veins in metamorphic rocks. Magnetite at the Wigwam (092M 010) occurrence is low grade, but reserves have been judged to be in the multibillion-tonne category.

Clay has been produced from two localities on the Hecate Lowland, the **Kisameet** (092M 007) and the **Decosmos** (092M 019) properties. Mud deposited during an interglacial period, has been preserved in southward facing bays, where pressure shadow area developed beneath overriding ice.

Known precious and base metal mineralization is restricted to the skarn-hosted **Powley** (092M 003) occurrence, and the **Nugent Queen** (092M 005) occurrences. Significant gold and silver assays were obtained from bulk samples from the latter, but very little geological information is available, including its precise location.

Rhodonite has been mined at the **Rose** (092M 015) occurrence.