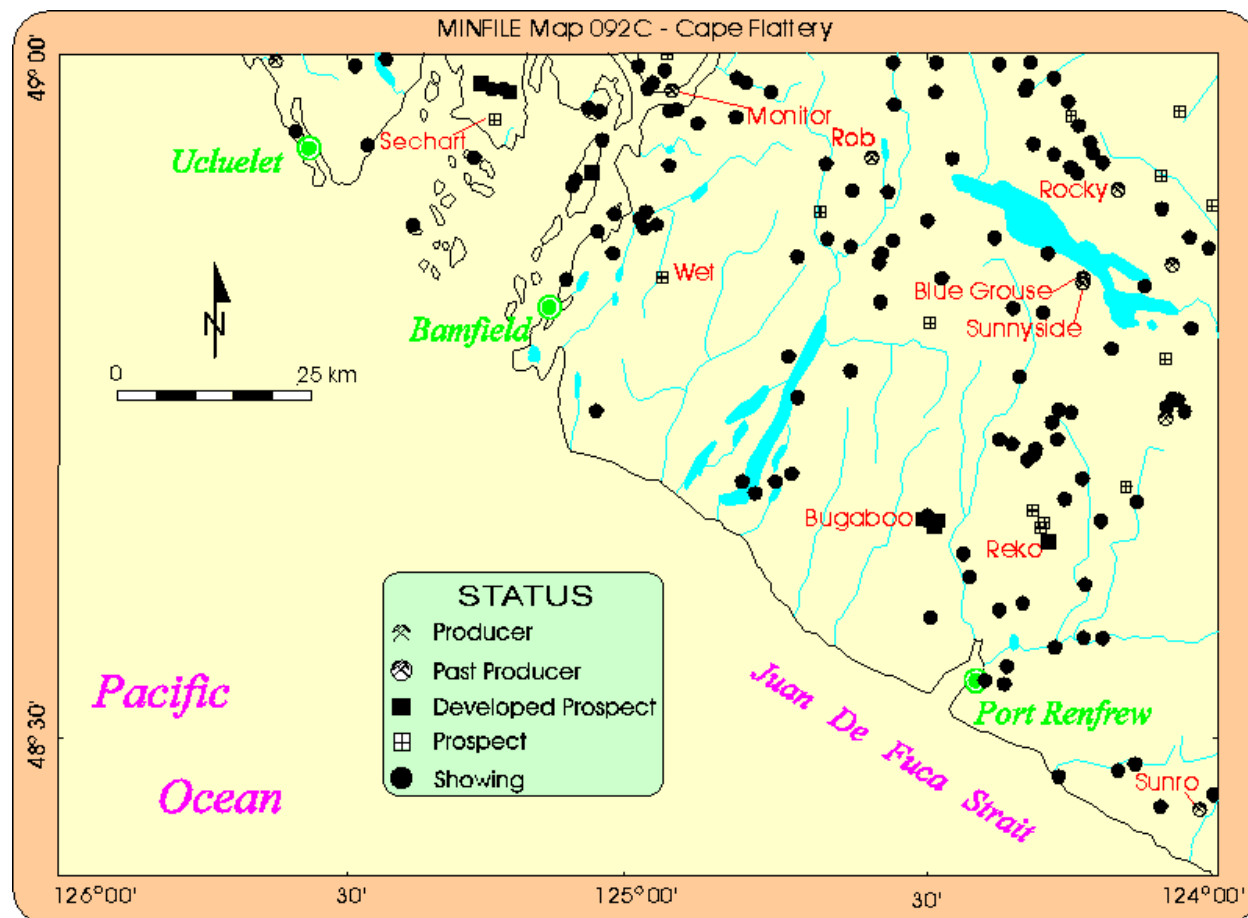




MINFILE NTS 092C - CAPE FLATTERY

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Researched and compiled by: D.E. Jakobsen, G.J. Payie

The Cape Flattery map area, with 149 known mineral occurrences, lies within the Insular Belt, comprising the Pacific Rim Terrane and a portion of the Wrangellia Terrane.



The geology consists of volcanic and sedimentary rocks belonging to the Paleozoic Sicker Group, the Mississippian to Permian Butte Lake Group, the Lower Jurassic Bonanza Group, the Upper Triassic Vancouver Group, the Upper Cretaceous Nanaimo Group, and the Jurassic to Cretaceous Leech River Complex. These are intruded by Early to Middle Jurassic Island Plutonic Suite (previously known as the Island Intrusions) granitic rocks and Tertiary dikes and sills (previously known as the Catface Intrusions). The Sicker and Butte Lake groups occur primarily in the Cowichan Lake area, at the southeastern extent of the Cowichan uplift, and are the main target for volcanogenic massive sulphide deposits. The stratigraphy of the Cowichan uplift has recently been redefined by Geological Survey Branch geologist N.W.D. Massey. A province-wide mineral potential study was launched in 1992 with Vancouver Island as the initial study area. Data resulting from this study are available on the Ministry web-site.

In order of historic importance, base and precious metal mineral wealth has occurred in such varied deposit types as skarns, shears, quartz veins, porphyries and volcanogenic massive sulphides. The numerous and well documented skarns in the Cape Flattery area warrant new exploration to determine the potential for precious metal mineralization. The **Monitor** high grade copper skarn (092C 007) occurs in the Alberni Canal area. Past production from the **Blue Grouse** (092C 017) and **Sunnyside** (092C 108) copper skarns in the Cowichan Lake area totals 6,814,623 kilograms of copper, 2,508,644 grams of silver and 218 grams of gold. The **Bugaboo** (092C 022) and associated iron-magnetite skarns in the Bugaboo Creek area have combined total reserves of 4,367,000 tonnes (unspecified grade). The **Rob** skarn (092C 034) in the Cowichan Lake area produced 61,929 kilograms of copper from a test run of 4665 tonnes in 1960. The **Reko** magnetite skarn prospects (092C 091) have estimated reserves of 4.5 million tonnes grading 22 per cent iron. High copper and gold assays have also been reported from the Reko property.

The **Sunro** shear-hosted deposit (092C 073) was an active mine between 1962 and 1972, producing 13.7 million kilograms of copper, 200 kilograms of gold and 2,262 kilograms of silver from a total of 1.3 million tonnes mined. This deposit has a remaining probable reserve of 1.47 million tonnes grading 1.43 per cent copper. The **Sechart** shear-related mercury deposit (092C 065) on the Sechart peninsula has been known since 1890. It has been intermittently developed over the years and today has over 100 metres of tunnels.

The **Wet** (092C 083) molybdenum prospect is classified as a porphyry-type deposit that occurs in Bonanza Group volcanics intruded by plutonic rocks of the Island Plutonic Suite. Several other molybdenum-copper porphyry deposits are documented in the map area

Rhodonite occurs in a cherty tuff horizon (Mississippian Shaw Creek Member) in the Fourth Lake Formation (Buttle Lake Group) in the Cowichan Lake area extending to the Hill 60 area (092B 027). The **Rocky** showing (092C 113) produced 555 kilograms of rhodonite from surface stripping in 1977 and 1978.

Placer gold has been mined, particularly from coastal areas. Sixteen occurrences exist with limestone as the primary commodity.

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