



MINFILE NTS 0920 – TASEKO LAKES

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The Taseko Lakes map area extends from the Coast Ranges in the west to the Fraser River in the east and, thus, covers parts of the Coast Plutonic Complex and the terranes of Cadwallader, Bridge River, Stikinia, Methow, and Cache Creek, as well as Cretaceous and Tertiary sedimentary and volcanic overlap assemblages. The MINFILE database contains 120 documented mineral occurrences on the mapsheet.

While the southern and eastern parts of the area have a long history of mineral exploration, there is no mineral production from the area at this time. However, significant deposits occur in this part of the mapsheet such as **Poison Mountain** (0920 046), containing 175,000,000 tonnes of 0.33% copper and 0.30 grams per tonne gold; **Fish Lake** (0920 041), with a reserve of 544,000,000 tonnes of 0.32% copper and 0.55 grams per tonne gold; **Taseko (Empress)** (0920 033), with 6,760,000 tonnes of 0.73% copper and 0.82 grams per tonne gold. The **Blackdome** mine (0920 053), an epithermal gold deposit, recently closed after producing about 310,000 tonnes of ore with a recovered grade of about 20 grams per tonne gold and 63 grams per tonne silver. In contrast to the above, the northern part of the map has no recorded mineral production and few mineral occurrences, mainly because of the difficulty of exploration in this region of poor exposure. In addition to metals deposits and occurrences, all known occurrences of the industrial minerals such as perlite (**Frenier** (0920 072)), bentonite, zeolites, diatomaceous earth and magnesite which occur within the map area have been documented.

Recent work by officers of the BC Geological Survey in the southern part of the map area has contributed a great deal to the reinterpretation of the area's geology in terms of terrane allochthoneity and post-accretion tectonics, enabling the mineral deposits and occurrences of the area to be placed into a tectonic and structural framework. An important result of this work has been the recognition of the role that major fault systems, such as those of the Tchaikazan and Yalakom, have played on the present disposition of structural and lithological blocks and their contained mineral deposits in the southwestern part of the map area. The interpretation of similar structures elsewhere in the map area enable structural and lithological extrapolation into areas of poor exposure with the consequent generation of exploration targets.

This compilation of geological, mineralogical, radiometric and ore deposit data suggests the importance of an Upper Cretaceous mineralizing event during which porphyry deposits and related base and precious metal veins were emplaced. A later event of epithermal ore deposition appears to be of Eocene age, corresponding to a period of subaerial intermediate to felsic volcanism whose products form a large part of the overlap assemblages of the Taseko Lakes map area.