MINFILE
NTS 104I – CRY LAKE

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The Cry Lake map area lies in the north-central part of the province and contains 124 documented mineral occurrences. The eastern flank of the Tanzilla Plateau forms the western edge of the map area and the northern part of the Spatzizi Plateau underlies the southeast corner. However, it is the Cassiar Mountains, which form the remainder of the map sheet that dominates the physiographic character of the area. Elevations range from 1215 to 2300 metres and with treeline at about 1525 metres elevation, the alpine exposes about 30 percent of the map area. Extensive glaciation, with south to north movement, has left its recognizable mark on the terrain.

The Cry Lake map area is almost equally divided between the Intermontane Belt, in the south, and the Omineca Belt in the north. Within these belts there are parts of up to six terranes separated by regional faults. The area northeast of the Kutcho and Thibert faults is underlain by miogeoclinal sediments, which are unmetamorphosed to strongly metamorphosed and intruded by granitic rocks; these are assigned to the Ancestral North America Terrane (Late Proterozoic to Mississippian age). Overlying the cratonal rocks are two allocthonous terranes: the Slide Mountain Terrane (upper Paleozoic to Mesozoic Sylvester Complex oceanic rocks) and the Quesnel Terrane (arc-type volcanic and associated granitic rocks and sediments of the late Paleozoic(?) to early Jurassic age). The Rapid River tectonite, possibly with Kootenay Terrane affinity, occurs along the western margin of the Sylvester Allocthon. Cache Creek Terrane rocks (upper Mississippian to Jurassic) form a composite unit of oceanic affinity in the lower part and island arc rocks in the upper part. These have been thrust southward along the King Salmon Fault onto Mesozoic island-arc and plutonic rocks and associated clastics of the Stikine Terrane.

Numerous plutons were emplaced during Late Triassic and Middle Jurassic times. Post-terrane accretion overlap assemblages include sedimentary and volcanic rocks ranging from the Lower Cretaceous to Pleistocene in age; the Early Cretaceous Cassiar Plutonic Suite represents the most significant post-accretionary igneous event.

Except for gold and jade placer mining operations and one in situ jade mining operation, the Cry Lake map area has seen little exploitation of its mineral wealth. A number of deposits of varying types are represented in the area and large still unexplored land areas hold good potential for further discoveries.

Over 250,000 grams of placer gold were recovered from **Wheaton** and **Alice** creeks (104I 004 and 005) between 1931 and 1945. One nugget (the Turnagain Nugget) found on Alice Shea Creek weighed 1612 grams and is periodically put on display by the B.C. Government. Placer jade, derived from the Cache Creek ultramafic rocks, has been produced from the **Wheaton Creek** (104I 085), **Letain Creek** (104I 079) and **Provencher Lake** (104I 092) deposits. **Kutcho Creek Jade** (104I 078) is an in-situ jade deposit and presently the only producer of any commodity in the map area.

Perhaps the most significant metallic mineral discovery in the area is the **Kutcho Creek** deposit (104I 060). This Noranda/Kuroko massive sulphide deposit is hosted in a metavolcanic package of the Upper Triassic Kutcho Formation (Cache Creek Terrane). This copper-zinc-silver-gold deposit has an unclassified resource inventory of about 28 million tonnes. The **Gnat Pass** porphyry copper deposit (104I 001) is hosted in intermediate volcanic rocks of the Stuhini Formation (Stikine Terrane) and has an indicated inventory of over 30 million tonnes of 0.39 per cent copper. The **Eaglehead** (104I 008) is a porphyry copper-molybdenum deposit with gold and silver values. It is hosted mainly in granodiorite of the Quesnel Terrane and contains 30 million tonnes of inferred ore. Asbestos occurrences are common in the Cache Creek serpentinites. The most prominent is the **Letain** deposit (104I 006) which contains a possible geological reserve of 15.7 million tonnes grading 4.7 per cent asbestos.

The **Dinah** (104I 096) prospect represents a sedimentary exhalative lead-zinc-silver deposit and is hosted in Paleozoic sediments of the Road River Group (Ancestral North America Terrane). The **Nizi** polymetallic vein occurrence (104I 032) is hosted in Paleozoic rocks with probable Kootenay Terrane affinity. This gold prospect has received considerable attention starting in 1970. A large area of tungsten skarning related to the intrusion of the Cassiar Plutonic Suite into Cambrian and Proterozoic rocks of the Ancestral North America Terrane occurs in the northeast (see **Ewe** (104I 025)). Several copper-nickel showings occur in a zoned ultramafic complex which was intruded into Quesnelia strata in the Late Triassic. These occurrences were originally explored as the **Turnagain** property (104I 014).

SELECTED REGIONAL REFERENCES (NTS 104I – CRY LAKE)

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