

MINFILE NTS 104H – SPATSIZI

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The Spatsizi map sheet, containing 37 recorded mineral occurrences, lies within the Stikinia Terrane of the Intermontane Belt. The regional geology is dominated by the east-west trending Stikine arch along the northern quarter of the map sheet and by the Bowser and Sustut basins over the remainder of the sheet.

Paleozoic sediments, metasediments, metavolcanics and intrusives and Middle Triassic to Middle Jurassic eugeosynclinal volcanics and sediments are exposed along the arch. These rocks form the basement of the Bowser basin into which the Middle Jurassic to Lower Cretaceous Bowser Lake Group clastic sediments were deposited. Sediments of the Lower to Middle Cretaceous Sustut Group unconformably overly the eastern margin of the Bowser Lake Group. Extensive plutonism during the Early Triassic, Late Triassic and Late Jurassic emplaced several phases of the Hotailuh Batholith.

The main types of mineralization consist of vein and porphyry-style copper (gold, molybdenum) deposits, limestone bodies found along the southern flank of the Stikine arch and coal found in the Groundhog coalfield of the Bowser basin. There are no current or past producers in the mapsheet, however, there are several advanced prospects of note. Porphyry-style copper-gold mineralization at the East and Main zones of the **Red-Chris** (104H 005) deposit is hosted by Tsaybahe Group volcanics which have been intruded by a hornblende-feldspar porphyry of monzonite composition. Indicated reserves of the combined zones are 39.6 million tonnes grading 0.28 grams per tonne gold and 0.56 per cent copper. At **Mount Klappan** (104H 020-022), inferred reserves of approximately 900 million tonnes of coal have been defined within three zones. Seams occur dominantly within the Currier Formation of the Bowser Lake Group and upwards of 25 individual seams have been defined in the Groundhog coalfield.

Targets for exploration would be prophyry copper (gold, molybdenum) deposits associated with the Rose and Edon plutons in the vicinity of Ealue Lake (**MFJ** (104H 001), **West** (104H 002), **Edon** (104H 004) and **Coyote** (104H 012) occurrences) and the widespread disseminated, vein and porphyry copper mineralization encountered in the region of Mount Sister Mary where andesitic volcanics are regionally intruded by the McBride River Pluton.