



MINFILE NTS 082FSW - TRAIL

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The Trail map area, with 378 known mineral occurrences, lies within the Omineca Belt. North American terrane rocks comprised of the Hadrynian Windermere Supergroup and overlying Lower Cambrian Quartzite Range and Reno formations occupy the southeast corner of the map area. To the west, these are in contact with the north-trending Kootenay Arc terrane consisting mainly of the Lower Paleozoic Active and Laib formations. The Slide Mountain terrane is thought to be represented in the map-area by Upper Paleozoic rocks of the Milford Group and Mount Roberts Formation. Lower Jurassic Rossland and Ymir groups rocks of the Quesnellia terrane comprise the thickest stratigraphic package, forming a broad northeast-trending belt in the central portion of the map area. The Rossland project (1987-1991) was initiated by the Geological Survey Branch in order to develop a greater understanding of the Rossland group.

Much of the map area is cut by the Middle to Late Jurassic Nelson Intrusions. The Early Jurassic Rossland monzonite, and several plutonic suites of Tertiary age, intrude the strata. The Valhalla Complex occupies the northwest part of the map sheet. It contains uniformly high-grade metamorphic rocks of uncertain age and several orthogneiss bodies of Cretaceous to Tertiary age.

The map-area contains four historically important mining camps or areas:

1) The Sheep Creek camp ranks sixth in the province in terms of total lode gold produced. The production came from mesothermal quartz veins mainly hosted by the Quartzite Range Formation. The most important producer was the Queen mine (082FSW048).

2) The Salmo belt, contains carbonate-hosted lead-zinc deposits, replacement manto-type and exhalative Kootenay Arc-type deposits. The Jersey (082FSW009), HB (082FSW004) and Reeves MacDonald (082FSW026) mines have all been important producers. The Emerald Tungsten (082FSW010) skarn deposit produced about 600,000 tonnes of tungsten ore.

3) The Rossland camp ranks as the second largest gold producing camp in British Columbia. Gold-copper-bearing veins occur in the Rossland Group rocks and in the Rossland monzonite stock. The Le Roi mine (082FSW093) is the best known of the many producers.

4) The deposits of the Ymir-Nelson area have produced more than 16,000 kilograms of gold (mainly from the Yankee Girl (082FSW068), Ymir (082FSW074) and Second Relief (082FSW187) mines) and 190,000 kilograms of silver (mainly from the Silver King (082FSW176) mine) primarily from vein deposits in the Elise Formation (Rossland Group). Mineralization comprises Au-Ag-Cu-Pb-Zn veins, porphyry molybdenum-copper deposits, "conformable gold" occurrences and skarns. The Stewart 2 (082FSW229) and Bobbi (082FSW250) prospects are the most significant porphyry occurrences. The Second Relief deposit is the third largest gold-enriched skarn in B.C. Several molybdenum and tungsten skarns also occur in the area. Four producing quartzite quarries occur in the Porcupine Creek area.

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