



MINFILE NTS 082LNE- REVELSTOKE

Original release date: March 1994 Researched and compiled by: G. Owsiacki

The Revelstoke map area lies in the southeastern part of the province and contains 45 documented occurrences. The map sheet covers the Shuswap Highland in the west and the Monashee Mountains in the east. This area is bordered to the east by Upper Arrow Lake, to the north by Eagle River, and to the west by the eastern arm of Shuswap Lake. The map sheet is entirely within the Omineca Belt and is dominated by rocks of the Kootenay and Monashee terranes. The map area is underlain by four tectonostratigraphic assemblages and various plutons that intrude them. Each assemblage has distinctive lithologic and metamorphic characteristics, and three of them are separated by major shear zones.

The structurally deepest assemblage is the Monashee Complex, which consists of Aphebian basement gneisses and a thin metasedimentary cover of Hadrynian to Cambrian(?) age. The other three assemblages belong to a composite sheet of accreted terranes and metamorphosed rocks of the North American pericratonic prism, which were thrust eastward, along the Monashee decollement, over the Monashee Complex in the Mesozoic to Paleocene. The Precambrian to Paleozoic(?) Shuswap Metamorphic Complex consists of high-grade metamorphic rocks of the Selkirk allochthon that lie structurally beneath the Okanagan-Eagle River detachment fault. Above the detachment are low to medium-grade metamorphic rocks that are subdivided into the Eagle Bay Assemblage and the Mount Ida Assemblage. The Eagle River Fault is a plastic-brittle normal fault that juxtaposes low to medium-grade metamorphic rocks of the Eagle Bay and Mount Ida assemblages against the Shuswap assemblage.

The Eagle Bay and Mount Ida assemblages lie on the western border of the map sheet. The Eagle Bay Assemblage is correlative with Paleozoic strata of the North American pericratonic prism. The Mount Ida Assemblage may also be correlative with Lower Paleozoic strata, but alternatively could at least in part be exotic with respect to the North American craton.

The Revelstoke map sheet is relatively under-explored and historically was not an important mining area. Most of the prospecting was done before the turn of the century and few mineral claims have been staked since then.

Stratabound zinc-lead and industrial minerals represent the predominant mineralization in the map area. Disseminated and massive sphalerite and minor galena occurs in quartzite, marble and calcsilicate gneiss units. The Kingfisher deposit (082LNE007) contains indicated reserves of 1.67 million tonnes grading 2.6 per cent zinc and 0.58 per cent lead. Diamond drilling at the Sherpa prospect (082LNE024) intersected a mineralized interval ranging from 17 to 27 metres which assayed up to 4.26 per cent zinc and 0.18 per cent lead across variable widths.

Kyanite, sillimanite, garnet and andalusite showings occur in high-grade metamorphic rocks. Pegmatites host mica, beryl and tourmaline showings; radioactivity is associated with some pegmatites. Quartzite beds within the metamorphic sequence are possible silica sources while marble beds may provide dimension stone possibilities. A horizon at the Kingfisher Marble deposit (082LNE041) is estimated to contain 2 million cubic metres of marble over a strike length of 500 metres and average thickness of 25 metres. Carbonatites have been recognized and yield anomalous rare earth values.

One mine, the Revelstoke Flagstone quarry (082LNE025), is seasonally operated. In the late 1940s, about 4032 tonnes of marl was produced from the Marlime deposit (082LNE043).