

Lower Palaeozoic.

Clastic rocks
overlying
Shuswap
series.

The Shuswap series is overlain on the Omenica by a band of slates, quartzites and conglomerates similar in lithological character and in geological position to the Bow River series of the Bow River section; and like it, probably referable to the Lower and Middle Cambrian. The conglomerates have an arkose appearance, and consist principally of small rounded quartz and felspar pebbles interbedded in a hard siliceous matrix. Fragments of schist and slate are also occasionally included. A purplish coloration of many of the quartz grains characterizes the conglomerates of this formation wherever found, from Bow River north to the Finlay. The conglomerates and associated rocks on the Omenica have a thickness of about 4000 feet.

A band of conglomerates and schists, referable to the Bow River series, also occur on the Finlay below the mouth of the Thudaca. These rocks overlie the Shuswap series and are similar in most respects to the Omenica occurrence. The conglomerates are greatly crushed in places, and often assume a schistose appearance from the development of secondary mica parallel to the cleavage planes.

A third band, similar in character to the others, forms part of the western slope of Mount Selwyn.

Castle Mountain group.

The conglomeratic bands are everywhere overlain by a great limestone formation, corresponding to the Castle Mountain group of the Bow River section, and like it, probably ranging in age from Middle Cambrian up to Cambro-Silurian. The limestones are grayish in colour, except where whitened along lines of disturbance, and are usually evenly bedded, but in places, especially when impure, pass into a calc-schist. No fossils were obtained from them.

Distribution.

Limestones of this group are found all along the western portion of the Peace River section through the Rocky Mountains east of Mount Selwyn, and extend northward along the range as far as examined. West of the Rocky Mountains they occur in bands of from four to eight miles in width, running in a north-westerly direction. One of these bands crosses the Finlay at its bend and extends south to the Ingenica where it is cut off, and two others cross the Omenica above the Tchutetzeca.

The limestone rests normally on the Bow River conglomerates, but in many places in the district the latter are absent, either from non-deposition or in consequence of faulting, and the limestone comes in direct contact with the Shuswap rocks.