

Preliminary geological investigation of Upper Carboniferous strata in southeastern New Brunswick

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Upper Carboniferous rocks in southeastern New Brunswick are comprised of red and grey, fluviatile strata which were deposited during late Namurian to Stephanian time. In ascending order they are referred to as the Boss Point, Salisbury, Richibucto and Tormentine formations. The succession is gently folded into a broad regional anticline which plunges shallowly to the east (Westmorland Anticline).

The relationship between the Salisbury and Richibucto formations is considered to be diachronous (facies equivalent), based on their laterally adjacent stratigraphic position and overlapping spore ages. The contact with the overlying Tormentine Formation is not exposed but is assumed to be conformable based on similarities in lithology, bedding style, bedding relationships

and the presence of overlapping spore assemblages. Field observations to date tentatively suggest the contact between the Boss Point and overlying Salisbury formations is concordant and locally appears to be interbedded; however, results from continuing field work and palynological studies in progress are needed before this can be stated with certainty.

A disconformity between the Boss Point and overlying strata elsewhere in southern New Brunswick (Moncton sub-basin) has been implied by palynological studies which have failed to record strata of late Westphalian A to mid Westphalian B age. In Nova Scotia strata of this age, assigned to the Cumberland Group, conformably overlie Boss Point rocks in the Cumberland sub-basin.