

RECONNAISSANCE STRATIGRAPHY AND  
STRUCTURE, GROUNDHOG COALFIELD,  
BOWSER BASIN, CENTRAL BRITISH COLUMBIA

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In the Groundhog coalfield a stratigraphic succession of Upper Jurassic-Lower Cretaceous strata estimated to be approximately 3,000 m thick is present. Reconnaissance mapping indicates the presence of 5 mappable units. The basal unit, informally named the Jackson Member, comprises a sequence (up to 1,800 m thick) of black shale, siltstone and rare conglomerate interpreted as marine shelf, slope and sub-marine fan deposits. Overlying the Jackson Member is approximately 450 m of interbedded sandstone, siltstone, shale and coal (Currier Member) considered as delta, estuarine and fluvial deposits. The Currier is overlain by a sequence up to 800 m thick of dark siltstone, shale, fine-grained sandstone and thin conglomerate and limestone of the McEvoy Member. The McEvoy Member is considered to include shallow marine, lacustrine and fluvial deposits. The uppermost member is the Devils Claw which consists of up to 500 m of massive conglomerate with minor interbeds of shale and sandstone that are interpreted as alluvial fan and plain deposits. In the eastern part of the coalfield the upper part of the Jackson, the Currier and the lower part of the McEvoy coarsen laterally to a conglomerates and stone-siltstone lithofacies (Pruden-

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tial Member) that is considered to include both fluvial and shallow marine deposits. The overall sequence of strata in the coalfield, starting with the Jackson at the base and culminating with the Devils Claw at the top, constitutes an overall coarsening-upwards regressive sequence. The mineralogy, paleocurrent data and facies relationships indicate the source areas where the emerging Omineca and adjacent terrains to the east and the northeast.

The structure in the coalfield is dominated by a major northwest-southeast trending anticlinorium-synclinorium pair. The Currier, Jackson and Prudential Members are characterized by tight kink and chevron folds and are penetratively cleaved. The overlying McEvoy and Devils Claw Members are folded disharmonically with the underlying units, expressing the presence of a fold detachment in the lower McEvoy or upper Currier Members.