## A STORM-GENERATED SEQUENCE IN THE GLAUCONITIC SANDSTONE, MANNVILLE GROUP, SOUTHERN ALBERTA

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Storm deposits, characterized by 'turbidite' conglomerates and (?) hummocky-bedded, fine-grained sandstone, have been recognized in a well (Jenner 12-32-20-8W4) in the subsurface Glauconitic sandstone unit of the Mannville Group, Southern Alberta.

Storm-generated sedimentation units occur above a bioturbated mudstone (offshore mud) and below a gravely sandstone with parallel, cross- or low-angle bedding (foreshore sand). These units are of two types:

Type 1. Cyclical units, 30 to 40 cm thick, with the following divisions:

- (iv) bioturbated mudstone (top);
- (iii) cross-laminated, very fine-grained sandstone;
- (ii) planar or (?) hummocky stratified, finegrained sandstone;
- (i) conglomerate, lying on a scoured surface (base).
- Type 2. Conglomerates, 10 to 15 cm thick, exhibiting a graded basal part and a parallel- or cross-laminated top part, alternating with parallel-bedded, coarse-grained sandstones (10-20 cm thick).

Type 1 deposits are believed to have been deposited by storm-ebb currents and storm waves and the type 2 by storm-generated turbidity currents.