

The origin of laminated intervals in the Ben Nevis sandstones of the Grand Banks: a preliminary report

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The talk discusses the repeated occurrence of laminated intervals in core obtained from the West Ben Nevis (WBN) B-75 and North Trinity (NT) H-71 wells. The core corresponds to the Ben Nevis Formation just above the Aptian unconformity, with depth ranges between 2004 m to 2094 m and 1997 m to 2168.9 m for wells WBN B-75 and NT H-71, respectively.

The core is composed of repeated intervals of lag-like layers overlain by a variety of laminations; among others are cross, vague and distinct parallel laminations. The laminations could either be very tiny (1 mm) and distinct or relatively thicker (up to 1 cm) but vague. They can also be solitary or concentrated. Tidal bundles and mud couplets

are also suspected to be present within these laminated intervals. These intervals are then topped by bioturbated units which were later eroded by the lag-like layer starting a new cycle. The goal of this study is to identify the depositional environment and the corresponding mechanism of deposition. Most probable depositional environments are lower shoreface, beach or washover sands.

It is the intention of this talk to show to the audience the different types of laminations and their relationship to each other in a given interval. Slides will be the main presentational method. Only preliminary results of this study will be presented and the bulk of talk will deal with the description of the core.