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This is section two of a set of three stratigraphic cross sections through the Saglek and Hopedale Basins in the Labrador Sea, on the east coast of Canada, from North to South.

The datum in all sections is top Kenamu. This is an event that appears visible on seismic and a top that is available in all wells. The wells are shown with the Gamma Ray and SP on the left side, the Sonic and Resistivity in the middle and the Density and Caliper on the right. Lithology stems from two different sources. Canstrat on the left column, and D'Eon Miller on the right. There are significant differences between the two, and it is important to be aware of the bias of each other. At right are the formation names in coloured section, to make comparison easy. They are based on the lithostratigraphic picks by Moir in the 70s. Where available, the newest biostratigraphic tops determined are indicated (Williams, 2007). They in many cases do not match the old picks, and sometimes cannot be seen on the logs matches with seismic tops. This results from the absence of good, basin-wide markers on the seismic and in the stratigraphic column. Added to the biostratigraphic tops is a column that shows the depositional environment as indicated by the biostratigraphical assemblages. At the bottom of each well is a plot that shows pressures, mud weights, overpressure indicators, pressure gradients, Eaton's Horner plot, fog analysis of these pressured intervals, thermal maturity as measured from vitrinite reflectance and Rock Eval, source rock potential as determined by Rock Eval and where cores have been cut and those porosities that have been measured on them.

Pore pressures have been calculated using accuracy considering where the top of the green Cartwright Formation lies in relation to the top Thanetian in the biostratigraphic tops in the wells Helga, Snorri (on shelf) and Bjarni (off shelf). The Cartwright Formation is a high pressure level, in Helga the Thanetian top sits in the middle of that formation and in Bjarni the whole formation is above the Thanetian top.

Overpressures are present in several wells. They are based on the mud weights. Only in Hopedale are these overpressures consistent. In the other wells there are only a few readings on the logs that indicate actual overpressure or transient ferrinants.

Thermal maturity is in the immature zone or in the oil window in the wells.

REFERENCES

Williams, G.L.
2007: Biostratigraphical analysis of Total Gastaldi et al. Bjarni O-82, Hopedale Basin, Labrador Shelf; Geological Survey of Canada Open File Report 5499, 19 p. (1 sheet).

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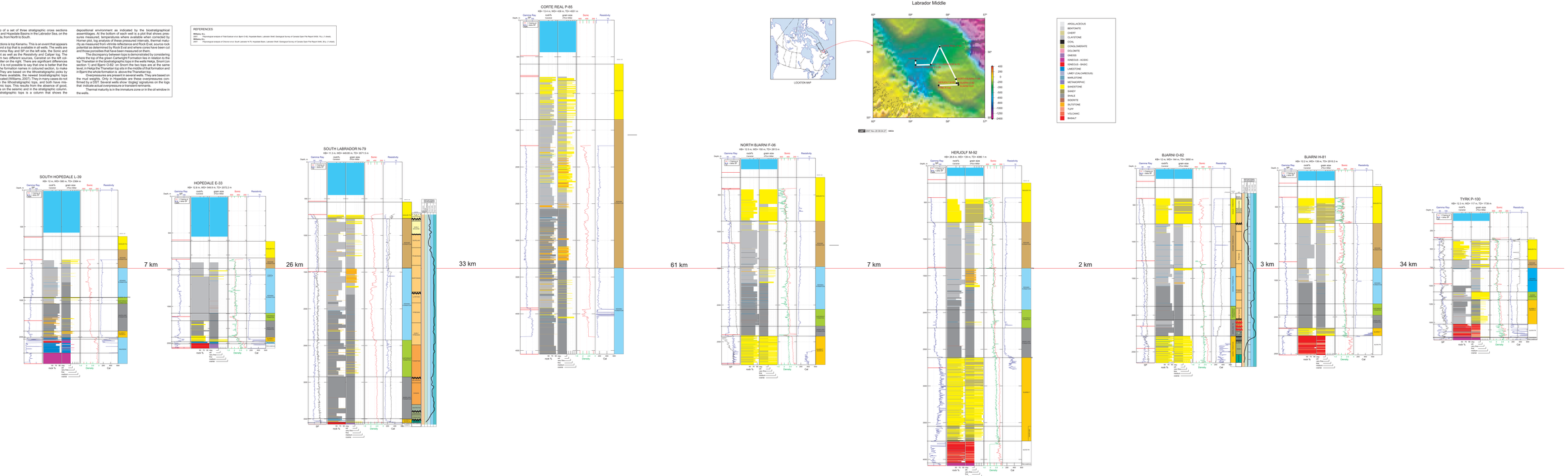
2007: Biostratigraphical analysis of Chevron et al. South Labrador N-79, Hopedale Basin, Labrador Shelf; Geological Survey of Canada Open File Report 5498, 26 p. (1 sheet).



Stratigraphic cross section South Hopedale-Tyrk, Hopedale Basin, in the Labrador Sea, on the east coast of Canada, from North to South.

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