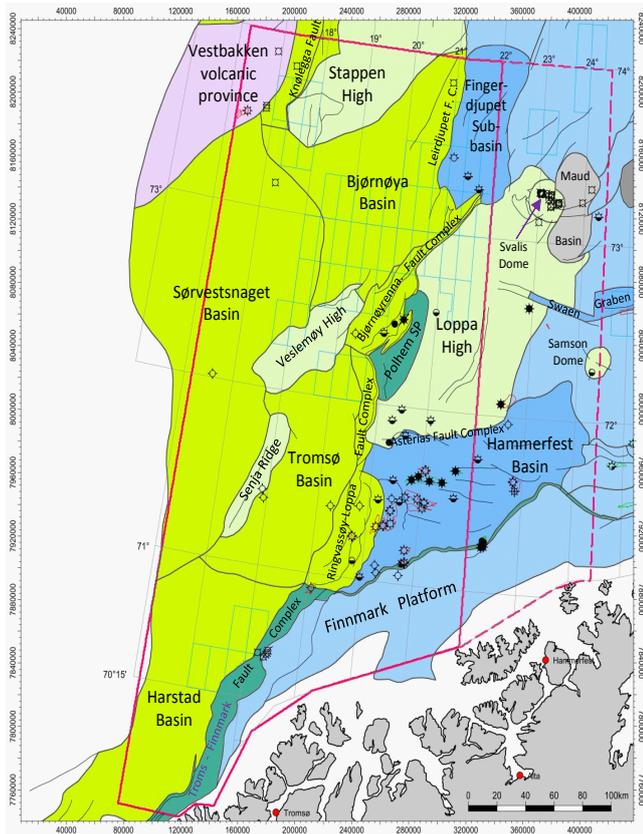


Mid-Cretaceous source rock distribution and quality in the Western Barents Sea

- The aim of this study was to model the non-homogenous source-rock of the Knurr and Kolje Formations using OF-Mod 3D (Organic Facies Model). This study is an extension of the Western Barents Sea Study (WBS 2012).



- The Cretaceous shales may be the source rocks for the following plays:
 - Paleocene and Supra Paleocene,
 - Upper Jurassic to Lower Cretaceous.

- Source rock intervals have been recognized within shales of the Early Cretaceous (Kolje Formation) in several wells in the Western Barents Sea.

 modelled WBS2012 and OF-Mod 3D Cretaceous study area

The study provides:

- Description of the initial source-rock distribution, that is, the quantity and quality of organic material in the deposits including the vertical and lateral heterogeneity of the source-rock potential,
- Testing different scenarios - various organic models: oxic, anoxic,
- Sedimentary facies distribution,
- Calibrated model: sand fraction distribution against V-clay data, the organic model is calibrated by comparing the measured (and if necessary back-calculated) TOC and HI with the modelled data.

Deliverables:

Modelled source-rock properties:

- Maps of cumulative thickness (m) of different source rock potential classes
- Maps of initial (pre-burial) TOC and HI
- 3D results (grid Eclipse (.grdecl) file format) of TOC and HI available on request

All maps can be delivered in a consistent Petrel project or as grids.

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