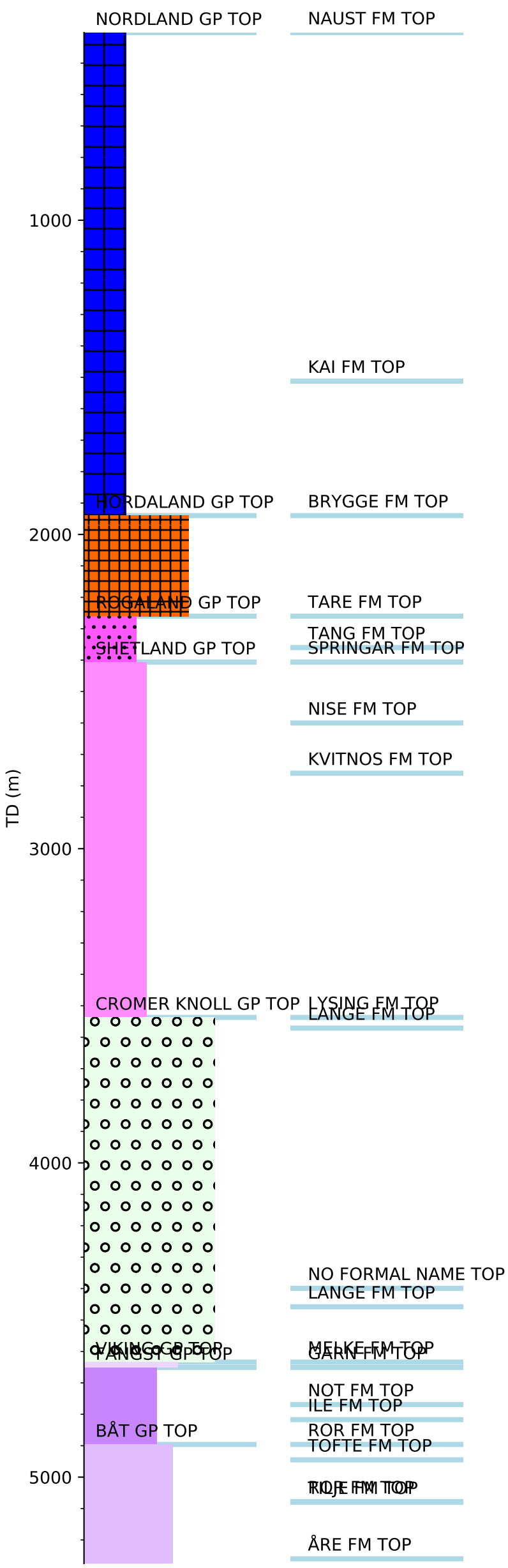


## Wellbore History

GENERAL

Well 6506/11-6 was drilled on a structure on the northern segment of the Kristin Discovery, ca 5 km west of the southern part of the Smørbukk Discovery offshore Mid Norway. The main objective was to evaluate and appraise the hydrocarbon potential of the Middle Jurassic Garn and Ile Formations.

OPERATIONS AND RESULTS

Appraisal well 6506/11-6 was spudded with the semi-submersible installation Deepsea Bergen on 24 February 1998 and drilled to TD at 5275 m in Early Jurassic sediments of the Åre Formation. The well was drilled with bentonite spud mud down to 1412 m, with Glydril mud from 1412 m to 2739 m, and with Versapro oil based mud from 2739 m to TD.

The well proved gas/condensate in the Garn and Ile Formations. Isolated shows were recorded on sidewall cores at 3563 m (Lysing Formation) and at 4517 m (Lange Formation), both in thin sandstone stringers. Shows were recorded from top of the Garn Formation sand reservoir at 4645 m to the top of the Upper Ror Formation at 4891 m (MWD depth, correspond to 4896 m loggers depth). Shows were also observed from 4952 to 4980 m (MWD depth) in the Tofte Formation, but these are probably a result of mud invasion. Ten conventional cores were cut in the interval 4652 m to 5125 m in the Middle to Early Jurassic, recovering a total of 297 m of core from the Garn, Not, Ile, Upper Ror, Tofte and Tilje Formations. Several runs with the Schlumberger MDT tool were performed. Pressure points and sampling were attempted in the Lysing and Lange sands, but with no success due to poor reservoir quality. Formation pressure measurements and fluid samples (gas and water) were collected in the Garn, Ile, Tofte and Tilje Formations. For the Åre Formation pressure measurements were achieved but no cores or fluid samples were taken.

The well was permanently abandoned on 22 August 1998 as a gas and condensate appraisal well on the Kristin Discovery.

TESTING

Three tests were performed, one in the Ile Formation and two in the Garn Formation.

DST 1 in the Ile Formation tested the interval 4839.2 m - 4849.2 m and produced 568000 Sm3 gas and 557 Sm3 condensate pr day on a 36/64" choke. The measured down hole DST temperature was 172.6 deg C.

DST2 in the Garn Formation tested the interval 4695 m to 4736.7 m and produced 78000 Sm3 gas and 105 Sm3 condensate pr day on a 12/64" choke. The measured down hole DST temperature was 162.8 deg C.

DST3 in the Garn Formation tested the interval 4649.4 m to 4668.3 m and produced 533000 Sm3 gas and 770 Sm3 condensate pr day on a 36/64" choke. The measured down hole DST temperature was 167.7 deg C.

Both wire line bottom hole temperatures and DST temperatures were recorded in this well. The wire line data from the final logging gave a Horner corrected temperature at final well TD of 173 deg C. The temperature data from well testing is believed to be the most reliable, but for all of the tests there were quite large pressure draw down and this reduces the quality of the evaluated temperature. DST 2 measurement had the largest pressure drop and lowest flow rate, and data from this test is considered the least reliable. At these high temperature and pressures Joule Thompson effects are assumed to give ca 7 deg C temperature increase in the flowing DST 1 and 3 well bore fluids compared to the true formation temperature.

# LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6506/11-6