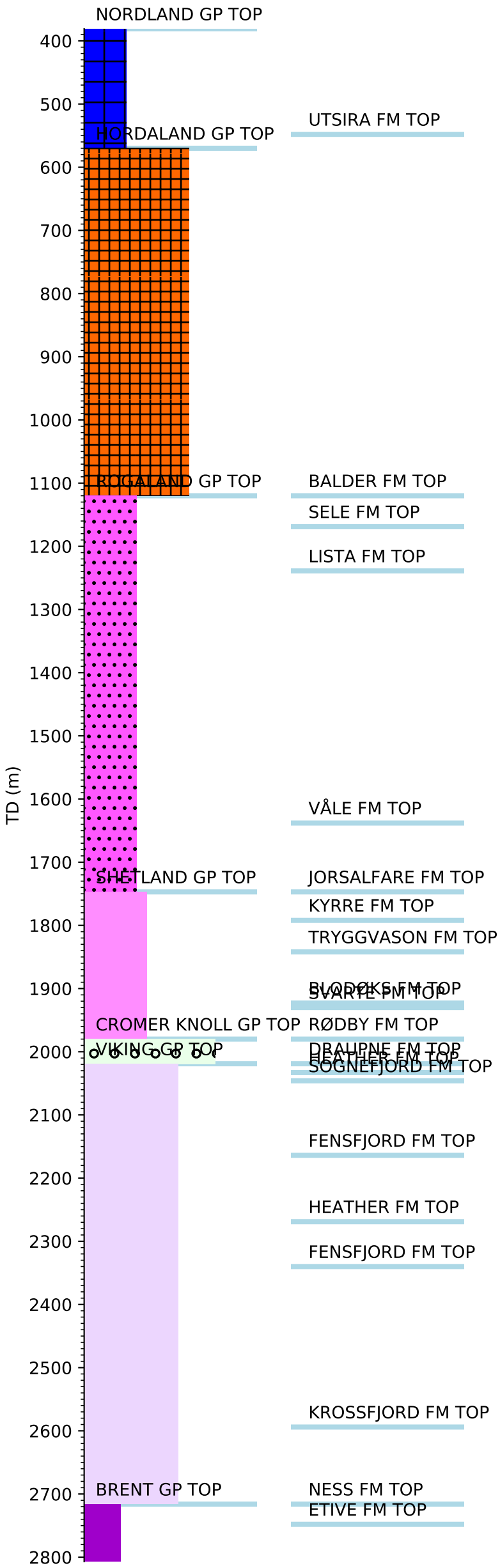
Groups

Formation Tops



Wellbore History

GENERAL

Well 35/12-3 S was drilled on the Gnatcatcher prospect in license PL 378. The Gnatcatcher prospect is located on the East flank of the Sogn Graben in the Northern North Sea, with a number of nearby fields and discoveries (Grosbeak, Fram East, Fram West, Gjøa, and Troll). The primary objective was to test the hydrocarbon potential in sandstones of the Late Jurassic Sognefjord Formation. Hydrocarbons in sandstones in of the Middle Jurassic Fensfjord Formation and Brent Group were secondary objectives.

OPERATIONS AND RESULTS

Wildcat well 35/12-3 S was spudded with the semi-submersible installation Songa Delta on 24 December 2011 and drilled to TD at 2807 m in the Middle Jurassic Etive Formation. No significant problem was encountered during drilling and logging operations. Sixteen day were spent as WOW after logging at TD before anchors could be pulled and the well abandoned. The well was drilled wit bentonite mud down to 523 m and with Aquacol KCl/polymer mud with 6% glycol from 523 m to TD.

All major stratigraphic units were encountered within their uncertainty. The Draupne Formation was encountered at 2019 m. The Heather Formation was penetrated from 2033 m down to top Brent Group at 2717 m. It consisted of five siltstone/claystone units separated by four major sandstone units: the Sognefjord Formation with sandstone from 2046.5 to 2058.0 m, an upper Fensfjord Formation sandstone from 2165 to 2269 m and a lower Fensfjord Formation from 2340 to 2547 m, and the Krossfjord Formation from 2594 to 2716 m. In the Brent Group, the Ness Formation showed minor sands developed whereas thick sand was encountered in the Etive Formation. All sands were water bearing.

Inconclusive hydrocarbon shows without increased gas values were seen in the Sognefjord Formation sandstone: "very weak dull yellow direct fluorescence and strong slow blue yellow cut fluorescence in the uppermost part of the interval, thereafter no direct fluorescence, slow, occasionally moderate fast, moderate strong blue yellowish blue cut fluorescence. All samples show yellowish white fluorescent residue". Organic geochemical analyses of cores samples from the shows interval gave a hydrocarbon fingerprint that suggested very low maturity, probably derived from organic matter in local Heather Formation siltstone.

Two cores totalling 39 m were cut from 2040.00 m to 2078.5 m in the Heather Formation including the entire Sognefjord Formation sandstone. The core depths and loggers depths were equal. RCI water samples were taken at 2054.5 m in Sognefjord Formation sandstone and at 2453.4 m in the Fensfjord Formation.

The well was permanently abandoned on 16 February as a dry well.

TESTING

No drill stem test was performed.

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LITHOSTRATIGRAPHY & HISTORY FOR WELL: 35/12-3 S