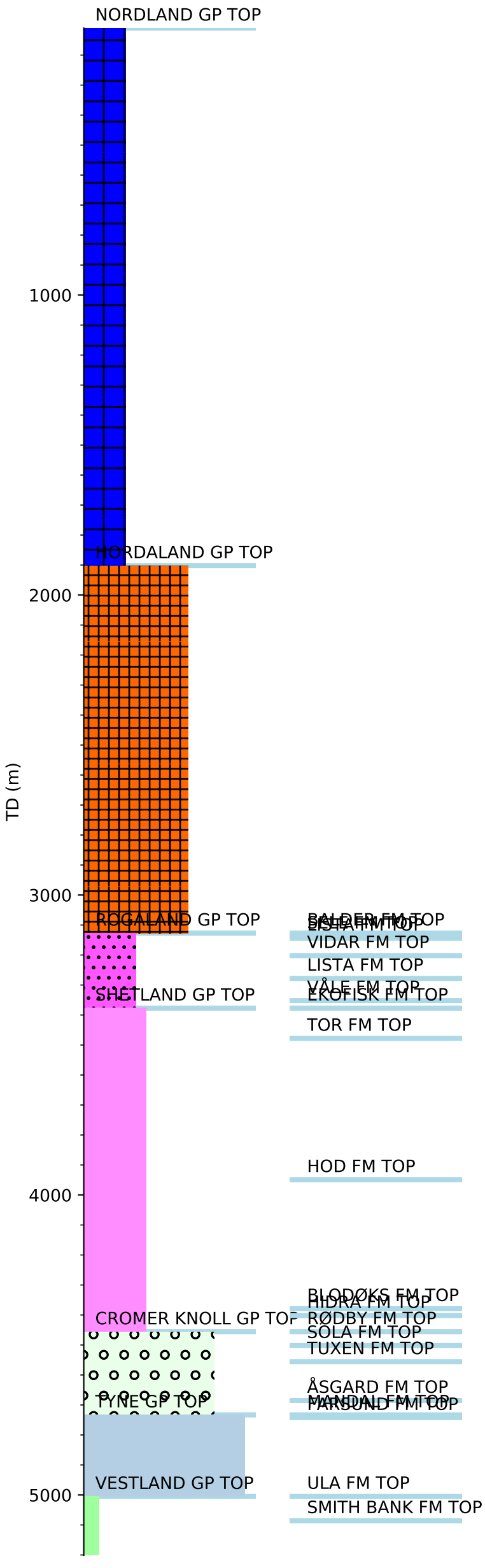
Groups

Formation Tops



Wellbore History

GENERAL

Well 1/3-8 is located on the Hidra High in the North Sea. The primary objective was to test the Jurassic Upper Ula sand package within the Kamskjell prospect. The secondary objective was a sand package at the base of the Jurassic. Planned TD was tagging the Triassic or reaching 5085 meters TVD SS.

OPERATIONS AND RESULTS

Wildcat well 1/3-8 was spudded with the 3 legs jack-up installation Transocean Nordic on 12 December 1996 and drilled to TD at 5199 m in the Triassic Smith Bank Formation. Two major unscheduled events occurred in the 12 1/4" section. First, the mud line hanger failed. A total of 16 days was required to repair this before drilling could be resumed. Secondly, and more serious, a 3.5 bbl kick was taken at 4529 m while drilling a limestone interval in the Early Cretaceous Cromer Knoll Group. Based on the worst case scenario interpretation of the kick, there could be a large volume of hydrocarbons (estimated at up to 300 bbls) in the annulus between the kick and thief zones. For this reason it was decided to rig up flare booms to increase the rig safety should it become necessary to by-pass the MGS whilst circulating out the influx. The well was opened up, and the influx circulated out at 3.3 bpm. Initially returns were taken through the MGS. After pumping 1464 bbls returns were switched from the MGS to the boom. This decision was taken as gas levels in the pit room were rising, and the seal leg pressure was dropping steadily (from 11.5 to 6.4 psi) indicating the onset of possible blow-down. The flare lit immediately with the clear burn characteristic of condensate. A total of 420 bbls was flared before mud was at surface and the flare extinguished. A total of 15 days were spent stabilising the well to permit running casing and continue drilling the next section. The well was drilled with seawater down to 303 m, with pre-hydrated gel mud down to 1105 m, with KCl/polymer/glycol mud from 1105 m to 3445 m, and with Ancovert oil based mud from 3445 m to TD.

The only live hydrocarbons found in the well was the condensate kick at 4529 m in the Cromer Knoll Group, believed to originate from a fracture in the Sola Formation limestone. The target Upper Ula Formation was not found in the well. Poorly developed and generally tight Basal Jurassic sands were encountered at 5005 m with a pooled thickness of ca 22 m. Poor oil shows were recorded in the interval 5007 to 5024 m in these sands. Thin sands were present also in the Triassic, but no shows were recorded in these.

One core was cut in the interval 5024 to 5041 m with 15.07 m recovery. One FMT fluid sample was taken at 5006.3 m, recovering muddy water with 190000 ppm of chloride.

The well was permanently abandoned on 27 May 1997 as a dry well with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 1/3-8