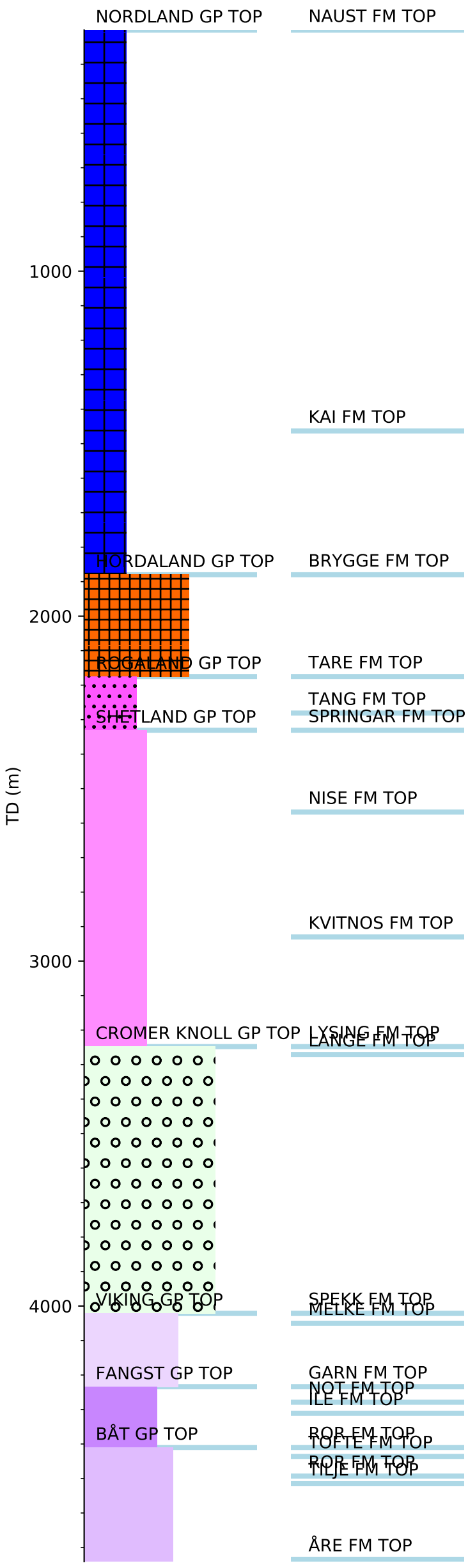

Wellbore History

GENERAL

Well 6506/12-6 was the third on the Alpha structure in block 6506/12, and the first appraisal well on this structure.

6506/12-1 was a gas/condensate discovery well on the Alpha South segment while 6406/12-4 encountered only traces of hydrocarbons on the high-pressured Alpha North segment. 6506/12-6 was classified as an appraisal well, and designed to further examine the hydrocarbon potential, of the Alpha South segment. The primary objectives were to verify the structural interpretation of the segment, and to define hydrocarbon-water contacts.

Primary targets were the Fangst and BÅt Group sandstones and the upper Cromer Knoll Group sandstone unit (Lysing Formation). Prognosed depth was 4780 m.

OPERATIONS AND RESULTS

Appraisal well 6506/12-6 was spudded with the semi-submersible installation Dyvi Delta on 31 March 1986 and drilled to TD at 4741 m, 6 m into Early Jurassic sediments of the Åre Formation. The 26" section was drilled first as a 12 1/4" pilot hole and then opened up with a 26" underreamer. At 777 m a survey indicated that the 26" hole was deviated from the pilot hole. After pulling out of hole and successfully reaming into the old pilot, the hole was opened up first to 17 1/2" bit, and then to 26". This was drilled to 1078 m before it was realised that the bit had again entered the deviated hole. After reaming suspected kick-off point drilling finally commenced in the vertical path to casing point. No further significant drilling problems occurred. The well was drilled with seawater down to 414m, with gypsum/polymer mud from 414 m to 1056 m, and with gypsum/polymer/lignite mud from 1056 m to TD

The Lysing Formation sandstone was penetrated from 3248 m to 3271 m. Well samples from this interval had weak shows (fluorescence but no cut). Top Shetland Group came in at 2331 m, top Cromer Knoll Group at 3274 m, and top Spekk Formation 4021 m. Top reservoir was encountered at 4230 m. The whole section from top reservoir through the BÅt Group had shows. Moveable hydrocarbons were encountered in Middle Jurassic sandstones (Ile Formation) and in sandstones of Lower Jurassic age (Tilje Formation). RFT-pressure points from this well and 6506/12-1, indicated an oil/water contact in the Garn Formation outside well position, between 4117 and 4150 m. No contacts were observed in the Ile Formation, which was interpreted as completely hydrocarbon-filled in this well. The fluid type in the Tofte Formation was uncertain since the formation was too tight for production to surface. The Tilje Formation consisted of interbedded sandstones, which appeared to be of different pressure regimes.

A total of 302 m core was cut in 13 cores from the Melke - Garn, Ile, Tofte - Ror, and Tilje Formations within the interval 4184 - 4634 m. RFT fluid samples were taken at 4271.5 m in the Garn Formation, and at 4644.7 m, 4518.2 m, and 4680 m in the Tilje Formation.

The well was permanently abandoned on 2 August 1986 as a gas/condensate appraisal well.

TESTING

Four drill stem tests were carried out in the Fangst and BÅt Group reservoir intervals.

DST No. 1 (4514 - 4525 m and 4549 - 4592 m) tested two separate zones in the Tilje Formation. PLT-log interpretation indicated water production from the upper zone. The uppermost 3 m of the lower zone produced oil and gas.

DST No. 2 (4464 - 4493 m) proved tight formation in the lower part of the Tofte Formation, and no formation fluids was produced to the surface.

DST No. 3 (4312 - 4352 m) in the Ile Formation produced gas and condensate

DST No. 4 (4237 - 4245 m and 4255 - 4277 m) tested two separate zones in the Garn Formation. Both produced water with some associated gas.