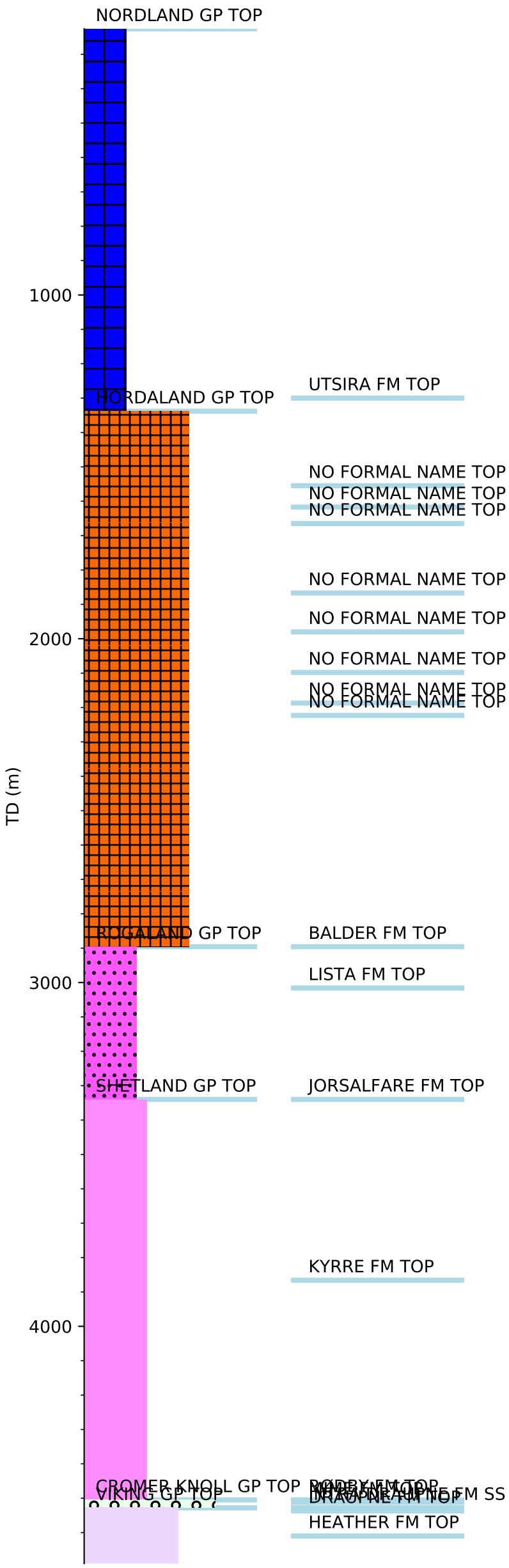


# LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/7-26 SR

## Wellbore History

GENERAL

Appraisal well 34/7-26 SR is located in the Tampen area in the Northern North Sea. It is a re-entry of well 34/7-26 S, which was suspended when the rig was needed for clean up work on well 34/7-B-2 H. The well had two primary objectives. Firstly, to perform an optimum data collection programme in the Top Draupne sandstone and in lower Shetland Group sands if these were present. Secondly, if there was thick and good quality Top Draupne sands present, the well was to be long-termed tested for six months to the Gullfaks-C Platform.

OPERATIONS AND RESULTS

Well 34/7-26 S was re-entered (34/7-26 SR) on 2 February 1998 through slot J-3 on Tordis Extension Template, approximately 2500 m south of the discovery well 34/7-21. The well was drilled with the semi-submersible installation Scarabeo 5. New Formation was drilled from below the 9 5/8" casing shoe at 4193 m in the primary well bore to final TD at 4690 m (2657.6 m TVD) in Middle Jurassic sediments of the Heather Formation. Inclination dropped from 59 to 20 deg in about 300 m. There were no particular problems with drilling, but the wire line logging programme was cancelled. Probably due to a severe rat hole below the 9 5/8" casing shoe, it was not possible to get any wire line logging tools into the open hole section. The well bore was drilled all through to TD with a pseudo oil based mud (Ancotec with Novamul).

The Top Cromer Knoll Group was penetrated at 4505 m (2480 m TVD), and consisted of the Rødby Formation from 4505 m to 4512 m and the Mime Formation from 4512 to 4528 m (2486 to 2502 m TVD). Two thin sandstones (approx. 1 and 2 m TVD) were encountered within the Mime Formation. The upper sandstone was grey in colour and bioturbated. The sandstone was dated to the Turonian-Coniacian stage. The lower sandstone exhibited a brown colour, and was bioturbated in the lower part. The lower sandstone was dated to the Middle Albian - early Late Albian stage. Both of the sands exhibited fluorescence. From log analysis, the sands exhibited good porosities, but had low permeabilities due to extensive cementation.

The main reservoir interval, the Intra Draupne Formation sand, came in at (4528 m (2502 m TVD), 24 m TVD shallower than prognosed. The gross thickness of the reservoir was approximately 9 m MD, compared to the prognosed thickness of 35 - 40 m. Net/gross ratio in the reservoir was 70%, average porosity 17.6%, average horizontal permeability 54 mD (from core), and average water saturation 39% (values derived from MWD-logs). Total thickness of the underlying Draupne Formation shale section was 75 m TVD. The Intra Draupne Formation reservoir consisted of bedded dark grey to black sandstones in a background of "allochtonous" black shales. Some lenticular bedding was distinguished in the core. The section was none to weakly bioturbated. The sands exhibited fluorescence. Interpreted from the logs, the best part of the reservoir was in the upper two meters. This section was unfortunately not covered by core.

From the analysis of the logs and the results from the core analysis, it was decided that the criteria for test production were not fulfilled. It was decided to drill a side-track well (34/7-26A) in a position closer to the 34/7-21 well.

No oil water contact was encountered in the well. The deepest oil down-to was observed at approximately 4543 m (2516 m TVD) in the Draupne Formation.

Coring was commenced at 4510 m, 20 m MD above estimated BCU depth. Core #1 jammed after 23 m, and only the upper 10.9 m was recovered. Core #2 started at 4533 m and ended at 4599 m. A total measured thickness of 76.9 m core was recovered. No wire line logs were run and no fluid samples were taken.

The well was plugged back and suspended on 2 February 1998 as an oil appraisal. Since the criteria for a test was not met it was decided [illegible] for the test (34/7-26 A) in a position closer to the 34/7-21 well.

TESTING

No drill stem test was performed.