



Wellbore History

GENERAL

Well 30/3-5 S was drilled on the G prospect, which lies to the east of the Veslefrikk Field. The main target was the Brent Group with Early Jurassic Statfjord Group as a secondary target. The well was designed to be completed as an oil producer on the G prospect.

OPERATIONS AND RESULTS

Well 30/3-5 S was spudded through slot 6 on the fixed installation Veslefrikk A on 1 May 1992 and drilled to TD at 4724 m (3340 m TVD) in the Early Jurassic Statfjord Group. Severe doglegs and ledging in the well path created problems in the 24" section from 472 to 1409 m. An attempt to reach an additional target in the Statfjord Formation failed due to problems with directional drilling. The well was drilled with gypsum/PAC mud down to 2551 m and with oil based mud from 2551 m to TD.

The planned targets were reached. The top of the Brent Group was penetrated at 4050 m, 8 m vertically deeper than prognosed. As expected, a fully developed Brent Group was present in the well. Apart from the Amundsen Formation, which came in 3.5 m shallower than prognosed, the formation tops came in slightly deeper than prognosed. The well proved hydrocarbons in the Brent Group and in the Cook Formation of the Dunlin Group. Differential pressure depletion was observed in some zones of the Brent Formation, attributed to communication with the main Veslefrikk Field which has been in production since 1989. The Statfjord Group had shows in the uppermost part. Rare, weak shows were seen in limestones and siltstones in the Shetland Group. No other shows were reported outside the reservoir section.

Five cores were cut. Cores 1 to 3 were cut from 4060 to 4160 m in the Ness-Etive-Rannoch-Oseberg formations, core 4 was cut from 4168 to 4213 m in the Oseberg Formation, and core 5 was cut from 4429 to 4446 m in the Cook Formation. All cores had significant positive depth shifts compared to logs; 5.5 m, 5.0 m, 5.5 m, 7.0 m, and 6.0 m respectively for cores 1 to 5. RFT fluid samples were taken at 4222 m and at 4426 m.

The well was completed on 19 June 1992 as an oil appraisal well. It was converted to development well 30/3-A-14.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/3-5 S