



Wellbore History

GENERAL

Well 6407/10-2 was drilled on the B-II structure south-east of the Njord Field, and is characterized by a prominent hanging wall anticline and syncline off the Trøndelag Platform and shows little tectonic disturbance as seen on seismic sections. From tectonic model inferred in the area, the tectonic damage to the reservoir rocks was expected to be less than previously encountered in the A-Central and the A-North areas. Movements along the main fault during the Late Jurassic caused sedimentation of Triassic and / or Middle and Early Jurassic clastics of delta fan type. Source rock for B-II area was prognosed to be the mature part of the Spekk Formation. Possible shallow gas might be present some 30 - 40 m below sea level. One core would be taken in each of the Garn, Ile and Tilje formations. The main objectives for the well were to asses the reservoir quality and hydrocarbon potential of the Garn, Ile, and Tilje Formations and the Late Jurassic sequence; to obtain reservoir pressure; confirm the seismic and geological model; and to asses the presence of sands in the Early Cretaceous sequence.

Prognosed TD was 3700 m in the upper part of the Tilje Formation, or alternatively 4040 m in Triassic rocks.

OPERATIONS AND RESULTS

Wildcat well 6407/10-2 was spudded with the semi-submersible rig Vildkat Explorer on 3 May 1990 and drilled to TD at 3825 m in the Early Jurassic Tilje Formation sandstones. The well was drilled with seawater and hi-vis pills down to 1070 m and with KCl/Polymer/Polyacrylamide mud system from 1070 m to TD. In the 17 1/2" section 1070 to 2188 m mud from a previous well was used, below 2188 m fresh mud was used. Apart from some difficulties during logging, drilling went on without any significant problems. No shallow gas was encountered in this well. Apart from 8 m Lysing sand at 2378 m there was no significant sand body development in the Cretaceous succession. The Garn Formation was not present in the well location. Hydrocarbons were absent in both the Ile- and Tilje formations. Weak to very weak shows were observed on claystones between 2660 m to 2720 m in the Lange Formation. Moderate to very weak shows were observed on claystones and sandstones throughout most of the Jurassic section. A total of 180 sidewall cores were attempted in three runs, and 104 were recovered. Two conventional cores were cut in the Ile- and Tilje formations. No fluid samples were taken. The well was permanently abandoned on 23 June 1990 as a dry well.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6407/10-2