



## Wellbore History

### GENERAL

Well 30/11-8 S was drilled on the Krafla prospect in the Fensal Sub-basin between the Frigg and Oseberg fields in the North Sea. The Krafla prospect is a horst structure with multiple reservoir levels. The main objective of the well was to prove a commercial hydrocarbon accumulation in the Upper and Middle Tarbert Formation with potential also for finding hydrocarbon accumulations in the deeper Eive and Ness Formations. A secondary well objective was to test a lead within the Paleocene Sele Formation (Hermod Sandstone). A geological sidetrack to the Krafla West structure would be considered if hydrocarbons and producible reservoir in the Brent Group were proven in the main well.

### OPERATIONS AND RESULTS

Well 30/11-8 S was spudded with the semi-submersible installation Ocean Vanguard on 20 March 2011 and drilled to TD at 4043 m (3844 m TVD) in the Early Jurassic Drake Formation. No significant problem was encountered in the operations. No shallow gas was detected. The well was drilled with seawater and hi-vis pills down to 813 m, with Performadrill WBM from 813 m to 2214 m, and with XP-07 OBM from 2214 m to TD.

The Viking Group, Heather Formation came in at 3473 m (3285 m TVD). The upper part of Heather had water filled sandstones with oil shows. The Brent Group was encountered at 3528.9 m (3339.0 m TVD) which was 17 m TVD deeper than prognosed. The Upper and Middle Tarbert Formation reservoirs proved to be oil filled, but no OWC was encountered. The Ness Formation came in at 3732 m (3538 m TVD) and proved to be both condensate and water filled, but no contact was found. The Eive Formation was water filled without shows. Also the lead in the Sele Formation (Hermod Sandstone) proved to be water filled.

Two cores were cut in the intervals 3481 to 3508 m (Heather Formation) and 3611 to 3666 m (Tarbert Formation). MDT fluid samples were taken at 3478 m (water), 3614.5 m (oil), 3555 m (oil), 3663.4 m (oil), 3748.2 m (condensate), and 3827.7 m (water). The oil samples had a contamination of 14 to 17 %, while the condensate sample was 30 % contaminated. All samples were taken with the MDT single probe.

The well bore was plugged back for sidetracking on 20 May 2011 as an oil and condensate discovery.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/11-8 S