



## Wellbore History

### GENERAL

Well 34/7-34 was drilled on the Vigdis Nordøst prospect located centrally in Block 34/7 on the Tampen Spur in the northern North Sea. The primary objective was to prove commercial volumes of oil in the Early Jurassic Statfjord Formation. In addition, the Late Jurassic Draupne Formation was listed as a possible secondary target as Intra-Draupne sandstone was encountered in the 34/7-8 discovery well on the Vigdis øst Field.

### OPERATIONS AND RESULTS

A 9 7/8" pilot hole, well 34/7-U-18, was drilled to evaluate for shallow gas, as two potential shallow gas warnings, class 1, were given to the well. Based on MWD/LWD logs water filled sands were encountered at the following depths: 377 m, 452 m, 562 m, 597 m, and 602 m. No indication of shallow gas at seabed was verified with the ROV. Neither were any indications of shallow gas observed at surface or measured while drilling the 36" and 17 1/2" hole in well 34/7-34.

Wildcat well 34/7-34 was spudded with the semi-submersible installation Borgland Dolphin on 14 February 2009 and drilled to TD at 2701 m in the Late Triassic Lunde Formation. No significant technical problems were encountered in the operations. The well was drilled with seawater and pre-hydrated bentonite sweeps down to 1189 m and with XP-07 oil based mud from 1189 m to TD.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous, Jurassic, and Triassic age. It penetrated the southern local high of the Vigdis Nordøst structure in a downflank position. The well indicated the presence of hydrocarbons in the Shetland and shows were described from 2210 m to 2290 m in thin sandstone beds. Surprisingly, neither the Cromer Knoll, nor any Viking Group was present in the well; the well penetrated directly from the Shetland Group and into the Amundsen shale of the Dunlin Group. The well penetrated oil-bearing Statfjord Formation sandstones at 2460.5 m. Oil was present down to 2514 m. No oil/water contact could be seen, and a sidetrack was decided. No shows were described below 2514 m.

One core was cut from 2473 m to 2502 m in the Statfjord Formation. MDT oil samples were collected in the Statfjord Formation at 2470.5 m (good quality, 8 bar draw-down) and 2502.5 m (86 bar draw-down and 6 - 8% mud contamination).

The well bore was permanently plugged back and abandoned on 10 March 2009 as an oil discovery.

### TESTING

No drill stem test was performed.

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