



## Wellbore History

### GENERAL

Well 34/8-8 was drilled to appraise the N-1 segment of the 34/8-1 Visund discovery on Tampen Spur in the Northern North Sea. The N-1 segment is estimated to contain approximately 30% of the resources in the Brent-North area. Confirmation of these resources was critical for reservoir management and production layout in future development plans. The primary objectives of the well were thus to confirm the resources in the Brent Group and to obtain data that could be used in reservoir engineering studies on improved oil recovery. Secondary objectives were evaluations of the Statfjord Formation and the Lunde B/C Formation. The well design and location was chosen primarily to evaluate the Brent target with respect to defining fluid contacts in clean sands, avoid faults, and penetrate as close as possible to the erosion edge of the top of the Brent Group.

### OPERATIONS AND RESULTS

Appraisal well 34/8-8 was spudded with the semi-submersible installation Transocean 8 on 30 June 1992 and drilled to TD at 3625 m in the Late Triassic Lund Formation. After drilling to 1430 m in the 12 1/4" section the drill string got stuck. 16.55 m of the BHA was left in the hole and the hole was plugged back to 1354 m where a minor technical sidetrack was performed. After setting the 30" casing an industry strike caused ca 5 days downtime. The well was drilled with spud mud down to 1364 m, and with Anco 2000 glycol mud from 1364 m to TD.

The Brent Group was encountered at 2921 to 3077 m. It was oil bearing and wire line logs confirmed an OWC at 2971 m, while RFT pressure tests suggested a free water level between 2973.4 m and 2976.8 m. From a gross Brent Group thickness of 156 m, a net pay thickness of 97 m was identified. An average porosity of 20.6% and average Sw of 34.7% were computed for the Brent Group oil zone. The Cook Formation, from 3122.5 to 3260 m, was found to be water wet without shows. The Amundsen Formation, from 3287 to 3387.5 m, was mainly claystone, but had a 12 m thick sandstone towards its base. The Amundsen Formation was water wet without shows. The Statfjord Formation was penetrated from 3387.5 to 3475 m. From a gross thickness of 87.5 m, a total net sand thickness of 46.25 m was recognised. The Lunde Formation was encountered at 3475 m and continued to TD. Both the Statfjord and Lunde formations were water wet without shows. Apart from in the oil bearing Brent reservoir, oil shows were recorded only in cuttings from thin sand stringers at 2460 m, 2515 m, and 2615 m in the Kyrre Formation.

Ten conventional cores were cut in the well. The whole of the Brent Group was cored in eight cores and two cores were taken in the Hegre Group. RFT fluid samples were taken at 2923.3 m in the Brent oil zone (water and filtrate), 2940 m in the Brent oil zone, at 2983.5 m in the Brent water zone (water and some gas), at 3390 m in the top of the Statfjord Formation (water and some gas).

The well was suspended on 24 August 1992 with the provision for further testing. It is classified as an oil appraisal.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/8-8