



Wellbore History

GENERAL

Well 30/6-2 was drilled to appraise the 30/6-1 Oseberg discovery. Well 30/6-1 found gas in the Brent Group and water-filled reservoirs in the Dunlin and Statfjord groups. The primary objectives were to test the Dunlin and Statfjord sandstones in a structurally higher setting on the Oseberg Alpha structure. Secondary objective was appraisal of the Brent Group hydrocarbons.

OPERATIONS AND RESULTS

Appraisal well 30/6-2 was spudded with the semi-submersible installation Deepsea Saga on 24 September 1979 and drilled to TD at 2890 m in the Triassic Hegre Group. Tight hole became a serious problem at 1313 m. This was cured with salt water and diesel addition. Five days were counted as non-productive due to bad weather and fishing for lost objects in hole. The well was drilled with spud mud down to 736 m, and with Chromium-Lignosulphonate/bentonite mud from 736 m to TD. After the diesel addition at 1313 m the mud contained 8% diesel. The diesel content became slowly diluted to 0.25% at TD.

The Brent Group was penetrated from 2191 to 2237. It is 46 m thick and gas bearing. The hydrocarbon/water contact was not seen in the well. The underlying Dunlin and Statfjord groups were both water bearing. Oil shows were described on cuttings and 39% water saturation was calculated, from top Brent and all through the Shetland Group up to 2165 m. Further oil shows on cuttings and core were described at 1945 to 1955 m in the Balder Formation, on cores and cuttings in the Dunlin Group, and on the Statfjord core.

A total of seven cores were recovered in the interval from 2202 to 2238.5 m in the Brent Group, 2435 m to 2437.5 m, and 2444.5 to 2454.5 m in the Dunlin Group, and 2571 to 2577 m in the top of the Statfjord Group. An RFT gas sample was taken at 2222.3 m.

The well was permanently abandoned on 11 December as a gas/condensate appraisal well.

TESTING

A drill stem test was performed from the interval 2212 to 2222 m.

The test produced 722000 Sm3 gas and 212 Sm3 oil /day through a 1" choke. The GOR was 3400 Sm3/Sm3, the oil gravity was 59 °API, and the gas gravity was 0.66 (air = 1). Water, sand or H2S were not observed, but 0.3 - 0.6% CO2 was recorded.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/6-2