



## Wellbore History

### GENERAL

Well 34/8-1 was drilled on the main prospect "A" in the block. A main rotated fault block flanking the Viking Graben defines the prospect. The closure of the prospect was mainly dependant upon a sealing fault separating the prospect from the structurally higher Gullfaks area. The main objectives of the well were to prove possible hydrocarbon accumulations in the structurally and stratigraphically highest reservoir zone (the Brent Group) in an optimal position, to verify the interpretation regarding the stratigraphic and structural evolution, and to drill in a position that tested both the structural closure and the sealing fault on the "A" prospect.

Secondary objectives of the well were to test the hydrocarbon potential, the stratigraphy and the reservoir quality in the Cook, Statfjord, and upper Lunde Formations; to drill in a position where the Brent Group showed no or minor erosion; and to drill in a position which left small quantities of hydrocarbons untested up dip in the Brent Group. The prognosed depth was 3750 m, ca 100 m into sands of the upper Lunde Formation.

### OPERATIONS AND RESULTS

Wildcat well 34/8-1 was spudded with the semi-submersible installation "Treasure Scout" 11 November 1985 and drilled to a total depth of 3610 m in the Triassic Lunde Formation. Certain problems were experienced in the beginning, and the well had to be re-spudded. After this drilling proceeded without significant problems. The well was drilled with sea water and hi-vis pills down to 925 m and with KCl polymer mud from 925 m to TD. The well penetrated a near complete Brent Group. The reservoir top came in at 2767 m, approx. 80 a higher than prognosed. Logs and RFT data show that it is a probability of gas down to 2854 and the oil/water contact is at 2864 m. Thirteen cores were cut in the well, 10 cores in the Brent Group, one in the Cook Formation, and one in the Lunde Formation. Two sets of segregated RFT samples were retrieved from 2852.5 m and 2858 m, in the gas zone and one in the oil zone respectively.

The well was plugged and abandoned on 8 March 1986 as an oil and gas discovery.

### TESTING

Three drill stem tests were performed in the well, DST 1 in the water zone, DST 2 in the oil zone and DST 3 in the gas zone. DST 2 experienced gas coning which could indicate that the oil is difficult to produce.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/8-1