



## Wellbore History

### GENERAL

Well 34/10-19 was drilled to investigate the southern section of the Gullfaks Phase II area. The primary objective was to penetrate the Cook sandstone above the oil water contact at 2118 m seen in well 34/10-9, and to improve the understanding of the reserve distribution in this part of the Gullfaks field. Secondary objective was the Statfjord sandstone.

### OPERATIONS AND RESULTS

Appraisal well 34/10-19 was spudded with the semi-submersible installation Ross Isle on 5 October 1983 and drilled to TD at 2218 m in the Triassic Hegre Formation. Shallow gas was encountered in a sand at 332 to 338 m. A 16" liner was required to stop gas flow between 20" and 30" casings. Several drilling breaks occurred in the 12 1/4" hole and lost circulation occurred in the 8 1/2" hole. The well was drilled with gel/seawater down to 8978 m, with gel/seawater/hi-vis pills from 978 m to 1494 m, and with gel/lignosulphonate/lignite mud from 1494 m to TD.

The upper sandstone part of the Cook formation (unit C3 and C2) was missing due to faulting and erosion. The lower Cook C1 unit was penetrated at 1779 m. This unit consists of dominantly claystones and it was water bearing. The sandstones of the Statfjord Formation were water bearing. Trace shows were recorded in the Hordaland Group on claystones from 960 m to 120 m and on claystone and on limestone from 1340 m to 1470 m. Trace to fair shows on siltstone, claystone and minor sandstones were recorded intermittently below 1470 m and down to 1861 m. No trace of hydrocarbons was seen below this depth.

Three cores were cut; one in the interval from 1763 in the Cromer Knoll Group to 1781.3 m in the Cook Formation, and two in the interval 1847 to 1874.8 m in the Jurassic Dunlin Group. No wire line fluid samples were taken.

The well was permanently abandoned on 6 December 1983 as a dry well.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-19