

Wellbore History

GENERAL

Well 31/6-6 was drilled in the Troll East gas province. It was designed to test possible gas accumulations in the Late to Middle Jurassic sandstones and to test the quality of a reservoir siltstone in the Heather Formation.

OPERATIONS AND RESULTS

Well 31/6-6 was spudded with the semi-submersible installation Deepsea Bergen on 22 May 1984 and drilled to TD 2293 m in the Late Triassic Hegre Group. No significant problem was encountered in the operations. The well was drilled with spud mud down to 716 m, with KCl/polymer mud from 716 m to 1771.5 m, and with pre-hydrated bentonite/CMC mud from 1771.5 m to TD.

The well encountered gas from top Heather reservoir at 1516 m to a GWC at 1568.5 m, 7.5 m into the Sognefjord Formation. No oil shows were reported from the well. Nine conventional cores were cut in the interval 1525 m to 1771.5 m in the Middle to Late Jurassic. FMT samples were taken at 1571.8 m and 1576.5 m in the Sognefjord Formation. Both contained formation water and mud filtrate.

The well was completed on 29 July 1984 as a gas appraisal.

TESTING

Two drill stem tests were performed in the well. DST 1A tested 1562 m to 1567.5 m in the Sognefjord Formation sandstone. It produced maximum 779 x 10 Sm3 gas /day on a 64/64" choke. DST 2 from 1523 m to 1536 m in the Heather Formation siltstone showed a very low production rate, $10.7 \times 10 \times 10^{-2}$ Sm3/day. The reservoir temperature was 62.5 deg. C in DST 1A and 58 deg. C in DST 2.