



Wellbore History

GENERAL

Appraisal well 31/6-2 was drilled on a location on the south-east periphery on the Troll East gas province. The main objective was to test the gas and oil accumulations in sandstones of Late to Middle Jurassic age. The planned TD was about 200 m into rocks of Triassic age to an estimated total depth of 2400 m RKB.

The well is Reference well for the Hardråde Formation and for the undifferentiated Shetland Group in the Troll area.

OPERATIONS AND RESULTS

Well 31/6-2 was spudded with the semi-submersible installation Deepsea Bergen on 18 October 1983 and drilled to TD at 2020 m in the Early Jurassic Drake Formation. Because of problems with a leak in 20" casing and lost circulation problems in a major fault, both 13 3/8" and 9 5/8" casing had to be set high. The well was drilled with sea water and hi-vis pills down to 412 m, with AQUAGEL/seawater spud mud from 412 m to 801 m, with KCl polymer mud from 801 m to TD. At 984 m Lost Circulation Material -pills were added to cure lost circulation problems.

No reservoir sections were developed above the Jurassic. The well encountered 113 m of Draupne shale with top at 1322 m, overlying a 25 m thick Heather Formation sequence. The Sognefjord Formation sandstone reservoir was encountered at 1460 m with a gas column of approximately 110 m. No oil leg could be detected from electric logs or FMT's. Oil shows were recorded on sidewall core sandstone in the interval from 1831 m to 1988 m in the Middle to Early Jurassic. Nine cores were cut from 1435 m to 1619 m in the Heather and Sognefjord Formations. FMT sampling in the Sognefjord Formation recovered small amounts of gas from 1475 m and 1572 m. A sample from 1577 m gave mud filtrate.

The well was suspended on 11 December 1983 as a gas appraisal.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 31/6-2