

Wellbore History

GENERAL

Well 6507/7-5 A is located on the northern part of the Halten Terrace off shore Mid Norway and was drilled to appraise the northern extension of the 6507/7-2 Heidrun Discovery. Well 6507/7-5 A was drilled as a geological sidetrack from the 6507/7-5 well to further evaluate and appraise the Middle and Lower Jurassic sands in a downthrown fault block adjacent to, and NNW of the one tested by the 6507/7-5 well. Prognosed TD was at 2721 m MD RKB.

OPERATIONS AND RESULTS

Appraisal well 6507/7-5 A was spudded the semi-submersible installation Nortrym on 6 March 1986. The well was drilled deviated from 6507/7-5 with kick-off point at 1100 m in the 6507/7-5 well and reached its TD at 2673 m in the Early Jurassic Tilje Formation. TD location was approximately 640 m NNW from the top hole location. No shallow gas was recorded during drilling. Due to technical problems, prognosed depth was not reached. The drill string became differentially stuck during a connection 9 m off bottom. After 7 days of fishing, the string was backed off, leaving a 387 m fish in the hole. Hence there were no final logs run on this well. Two days were spent waiting for weather. The well was drilled with KCI/polymer mud from kick-off to TD.

The well proved an even longer hiatus in this well than in well 6507/7-5: from the Late Cretaceous Turonian to the Middle Jurassic Aalenian/Bajocian. Hence, no Late Jurassic sediments were encountered. The Fangst Group, Garn Formation, came in at 2554.5 m (2420.6 m TVD RKB) and the Båt Group at 2582.5 m (2445.2 m TVD), with top Tilje Formation at 2598.0 m (2458.8 m TVD). Analysis of cores indicated good to excellent porosity and permeability with shows.

Poor to moderate shows occurred in siltstone and sandstone samples from the Cretaceous between 2300 and down to top Jurassic. In the Fangst Group oil shows appeared first at 2560 m, ca 3 m down from the top of core no 1 and 5 m below top Garn Formation. A transitional zone of increasingly strong oil shows followed down to 2563 m from where good shows persisted down to 2629 m ca 13 m TVD into the Tilje Formation. An oil-down-to contact was thus indicated at this level, supported by logs. However, since no RFT was run and occasional oil shows were observed in sandstone and siltstone fragments down to TD the hydrocarbon contact remained unclear.

Coring commenced at 2557 m, and 6 cores were cut in the interval 2557 - 2629.6 m. No fluid samples were taken on wire line.

The well was permanently abandoned on 5 April 1986 as a dry well. The well was plugged and abandoned as an oil and gas appraisal, with possible communication between the Fangst and Båt Groups.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/7-5 A