

Wellbore History

NORDLAND GP TOP <mark>ĦO</mark>RDALAND GP TOP 1000 ROGALAND GP TOP **BALDER FM TOP** SELE FM TOP TD (m) LISTA FM TOP SHETLAND GP TOP TOR FM TOP **HOD FM TOP CROMER KNOLL GP TOP** 000000 000000 2000 000000 000000 000000 000000 000000 WIKONG GPOTOP DRAUPNE FM TOP **VESTLAND GP TOP** NO GROUP DEFINED TOP

Well 25/12-1 is located on the Patch Bank Ridge between the Utsira High and the Stord Basin in the North Sea. The well was designed to test Paleocene sand and late Cretaceous chalk prospects (found oil bearing in the adjacent Esso blocks). Additional objectives were the Mesozoic and possibly older sands, which formed part of a monocline, east dipping subcrop below this structure. The well was programmed to investigate the entire sedimentary sequence down to igneous/metamorphic basement, interpreted to occur at approximately 2743 m.

OPERATIONS AND RESULTS

Wildcat well 25/12-1 was spudded with the semi-submersible installation SEDCO 135 G on 3 October 1973 and drilled to TD at 2865 m in rocks of possible Devonian age. The spud was delayed due to rig repairs in Hamburg. This resulted in the well being drilled during the worst of the winter weather. Due to adverse weather and bad anchoring conditions, 14.5 days were spent anchoring the rig. A total of 19.7 days was lost directly due to weather during drilling and abandoning. A further 8.7 days were lost repairing underwater equipment, much of which was also due to weather damage. The well was drilled with seawater and bentonite down to 463 m and with a seawater / lignosulphonate mud from 463 m to TD.

The Oligocene-Eocene sands of the Hordaland Group were water bearing and the Paleocene sands absent. The Chalk section (Tor and Hod formations) showed poor reservoir characteristics and was also water bearing. Below the Late Jurassic shale sequence sands and conglomerates of Middle Jurassic age and older were penetrated. The sands were penetrated in a down dip position on a monoclinal structure rising towards block 25/11. Middle Jurassic (Vestland Group) sands were encountered at 2244 m with porosity up to 30 %, averaging 18 %. Conglomerates were encountered at 2425 m and extended down to 2671 m. From this point down to TD at 2865 m the well drilled a thick water bearing sand sequence. This possible Devonian sandstone ranged in porosity from 17 % - 23 % with an average of 20 %. No hydrocarbon indications were present in the well, with the exception of characteristic gas indications in the Late Jurassic Draupne Formation source rock interval, which at this location was found to be immature. In view of the discouraging results obtained thus far, together with the fact that no seismic configuration was mappable below this depth, it was decided to abandon the well without having reached igneous rock. One core was cut in the ?Devonian conglomerate from 2450 m to 2456 m. No fluid sample was taken

The well was permanently abandoned as dry on 23 November 1973.

TESTING

No drill stem test was performed