



Wellbore History

GENERAL

Well 24/12-1 R is located on the Gudrun Terrace, about 15 km east of British sector. The purpose of the well was to evaluate a seismic closure, named Gamma, in the southern part of the Block. The main objective was the Middle Jurassic sands. Well 24/12-1 R is a re-entry of well 24/12-1, which was suspended after setting the 9 5/8" casing at a TD of 3966 m in the Early Cretaceous.

OPERATIONS AND RESULTS

Wildcat well 24/12-1 R was spudded with the semi-submersible installation Treasure Seeker on 7 June 1978 and drilled to TD at 4825 meter in the Triassic Group. Three cement plugs were drilled in the 9 5/8" casing using the existing mud left in the hole before re-entry. The 9 5/8" casing shoe was drilled out at 3966 meters using 1.93 - 1.94 R.D. mud weight. After drilling the shoe, circulation and rotation stopped as the pipe stuck at 3968 meters. The pipe was freed and pipe rubbers that had been stripped were circulated out. Resumed drilling and raised mud wt. to 2.00 R.D. Ran core barrel from 4160 meters to 4182 meters, after running core barrel raised mud weight in active system to 2.04 R.D. due to background gas. Turbine drilling was continued to TD. When the sub sea assembly was pulled when abandoning the well it was realized that the rig for some time during the operation must have been off location. Severe wear on the flex-joint and bag preventers was discovered. This probable rig offset also caused several of the drill pipe rubber protectors to be torn off, which probably caused the stuck pipe at 3968 m. The rubbers were circulated out of the hole during several days and caused directly or indirectly many days of lost rig-time. The well was drilled with a Spersene / XP-20 / Resinex lignosulphonate / lignite mud system from re-entry depth to TD.

The Late Jurassic Draupne Formation was encountered at 4055 m and was 85 m thick. Below this depth 210 m of alternating Heather Formation shale and Intra Heather Formation Sandstone was penetrated. The target Middle Jurassic sandstones were encountered in the Vestland Group at 4350 m which consisted of 348 m interbedded shale and sandstone. Massive coals were frequent in the upper part down to 4361 m. Oil shows were recorded in sandstone in the interval 4180 m to 4225 m, mainly in the uppermost Intra Heather Formation Sandstone. Below this depth weak patchy shows were recorded down to 4431 m. Organic geochemical analyses found rich source rock potential for oil in the Draupne Formation (TOC = 3.5 % to 4.3 %). The formation had reached oil window maturity (%Ro = 0.8). Three cores were cut in the intervals 4170.5 m to 4173.3 m, 4173.3 m to 4178.9 m, and 4178. 9 m to 4182.0 m. No Fluid sample was taken.

The well was permanently abandoned on 14 August 1978 as a well with oil shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 24/12-1 R