



Wellbore History

GENERAL

Block 6408/4 is situated on the eastern side of the Trøndelag Platform off shore mid Norway. The drilled prospect is a large, gently dipping structure that is bounded by a southeast dipping fault with dip closure in all other directions.

The objectives were to test for the development of the Late Jurassic Rogn sands and their hydrocarbon potential, and to test for hydrocarbons in the Middle Jurassic Fangst sands. Both Late Jurassic shales and the Lower Jurassic Åre coal unit were considered to be immature on the block. Long distance migration of oil was a critical aspect of the prospect and as such constituted a major risk.

OPERATIONS AND RESULTS

Wildcat well 6408/4-1 was spudded with the semi-submersible installation Vinni on 18 September 1988 and drilled to TD at 2725 m in the Triassic Grey Beds. There were certain problems with hole stability down to 830 m. The drill string twisted off at 370 m and had to be fished up. During logging the tool did not get past 622 m, and due to this there is a lack of conventional log between 622 - 830 m. Otherwise operations went without significant problems. The well was drilled with seawater and hi-vis pills down to 830 m and with KCl/polymer mud from 830 m to TD. No shallow gas was encountered.

The prognosed sand in the Rogn Formation was not developed. A change from high gamma response shale to lower gamma response at 1734 m in the Spekk Formation was noted. The reservoir sections in the Middle and Early Jurassic Fangst Group were encountered at 1825 m to 2015 m with 140 m net sand with 30.5% average porosity (log evaluation). The Båt group and the Triassic also had sands; the most massive of these was the Tilje Formation with 130 m net reservoir with 25.6% average porosity. All reservoir sections were water bearing and there were no shows or stain recorded while drilling. One core was cut between 1745 m to 1746.4 m in the Spekk Formation. A second core was attempted without success. No RFT was run in the well and no fluid sampling attempted.

The well was permanently abandoned on 18 October 1988 as a dry hole.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6408/4-1