



Wellbore History

GENERAL

Well 16/2-1 is located on the very western part of the Utsira High in the central part of the Vestland Arch. The Utsira High is a large, flat, fault bounded basement feature. The objective of this early well in the North Sea was: "To test the hydrocarbon potential of the sedimentary section; investigate the lithology and sequence in this portion of the North Sea basin; and to partially fulfil Esso's drilling obligation to the Norwegian Government incurred on behalf of the Licences."

OPERATIONS AND RESULTS

Wildcat well 16/2-1 was spudded with the semi-submersible installation Ocean Traveler on 11 July 1967 and drilled to TD at 1906 m, 33 m into basement rock. There were no noteworthy drilling problems encountered while drilling. Initial drilling from the sea floor to 381 m was with seawater and gel without casing. Returns were to the sea floor. Below 381 m to total depth of 1906 m, a seawater slurry with gel, CMC, Spersene, XP-20, Caustic Soda, Barite, and 0-10% diesel oil was used.

Oil shows were seen on cores in tight Cretaceous carbonate rocks in the Tor Formation. The shows were strong and continuous from top Tor Formation down to 1776 m, and then became patchy. These rocks were too impermeable to justify further tests in this well. Weak shows were seen also in a thin Oligocene sand from 1256 m to 1263 m and in Eocene mudstones from 1631 m to 1637 m, Balder Formation. Dead oil/tar was observed in fractures in the basement rock.

Five cores were cut from 1739.5 m to 1821.8 m in the Tor Formation chalk and two more cores were cut from 1879.1 m to 1883.7 m in the basement. Four Formation Interval Tests (FIT) were performed at 1748.9 m, 1733.4 m, 1642.6 m, and at 1738.2 m. The tests, one in Early Tertiary shales and three in Late Cretaceous carbonates, did not show any hydrocarbons.

The well was permanently abandoned on 9 August 1967 as a well with shows.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/2-1