



Wellbore History

GENERAL

Wildcat well 31/2-5 is located in the southern part of the oil province in the Troll West area, some 6 km west of the discovery well 31/2-1, in a downthrown fault block. It was drilled in 1980 and tested in the re-entry 31/2-5 R in 1981. The objective of the second re-entry was to test and quantify the water mobility (oil-water coning behaviour) in the aquifer zone underlying the oil column to provide input for the Field Development Plan of the Troll Field.

OPERATIONS AND RESULTS

Wildcat well 31/2-5 R was re-entered (31/2-5 R2) with the semi-submersible installation Borgny Dolphin on 22 March 1984. The cement suspension plug (1261 m to 1450 m) was drilled out and a test was carried out.

The well was permanently abandoned on 22 April 1984.

TESTING

A 3 m interval directly above the oil-water contact (1566-1569 m SS) was production tested. The test was conducted in three periods, a cleanup period (PT-2A), a period before acid treatment (PT-2B), and a period after acid treatment (PT-2C) The oil sample available from the NPD was sampled in PT-2B. The well produced up to 1002 Sm³ (6300 bbl) liquid /day. The water cut decreased in two days from high initial values (> 40%) to a stable value of 20%, independent of the liquid rate. The stable water cut was apparently controlled exclusively by the relative mobilities of oil and water. The rate dependence of the Productivity Index, significant before the acid job, almost disappeared after acidizing.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 31/2-5 R2