

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 found a 21 m thick oil zone in excellent reservoir sandstone. The oil column in this location was found to be significantly thicker than in other wells in the area. The objective of the re-entry was to perform a production test in the oil zone.

OPERATIONS AND RESULTS

Wildcat well 31/2-5 was re-entered (31/2-5 R) with the semi-submersible installation Borgny Dolphin on 12 June 1981. The cement suspension plug (1204 -1465 m) was drilled out and a test was carried out.

After testing a cement plug was set from 1261 m to 1450 m and again suspended on 20 July 1981.

TESTING

One drill stem test was carried out. The oil zone was perforated from 1582 m to 1588 m and acidized to reduce impairment of the formation caused by completion fluids. The interval was then tested through gravel pack and produced 906 Sm3 (5700 bbl) oil /day on a 64/64" choke. The GOR was 53 Sm3/Sm3 and the oil gravity was 29 deg API. Opening up the choke to 2 x 64/64" the rate increased to 1177 Sm3 (7400 bbl)/day and the GOR increased to 243 Sm3/Sm3. Gas chromatographic analyses of the crude showed a bacterially degraded oil where the n-alkanes were almost absent.