

Wellbore History

GENERAL

Block 6302/6 is situated in deep water in the western part of the Møre Basin in the Norwegian Sea with well 6302/6-1 located ca 100 km west of the Ormen Lange Field. At the well location the Quaternary North Sea Fan (Naust Formation) is very thick. No other wells have penetrated such thicknesses of North Sea Fan sediments. The primary objective of the well was to prove hydrocarbons in sandstone of Danian age (Paleocene) in the Rogaland Group. Total depth of the well was estimated to be 4375 m, in the Late Cretaceous Springar Formation.

OPERATIONS AND RESULTS

Well 6302/6-U-1 was spudded semi-submersible installation Eirik Raude on 1 June 2005 and was drilled without significant problems to a total depth of 2122 m. At this depth a water flow was observed in the lower part of the North Sea Fan. After pumping kill mud in several steps, the well was proven stable. The 20" casing was set and cemented with shoe at 2116 m. Water flow was still observed. The well was then abandoned due to the ongoing water flow.

Well 6302/6-1 was then spudded with Eirik Raude 62.5 m southwest of 6302/6-U-1 on 24 June 2006 and in a water depth of 1260.5 m MSL. No shallow gas was observed by the ROV at the wellhead. It was drilled to a total depth of 4234 m (loggers depth) in the Late Cretaceous Springar Formation. The well was drilled with seawater and hi-vis pills down to 1965 m and with Glydril Deepwater mud from 1965 m to TD.

The well penetrated rocks of Quaternary, Tertiary and Cretaceous age. An interbedded sandstone reservoir section with a total thickness of approximately 100 m was penetrated at 3901 m in the lower section of the Rogaland Group, slightly shallower than prognosed. A large data acquisition programme was performed. A minor gas discovery was proven in the upper part of the reservoir section. Unexpectedly, several thick limestone beds were found in the transition zone between the Palaeocene and the Late Maastrichtian. These beds were between 5 and 20 m thick and with a gross thickness of 35 - 40 m.

Three cores were cut in the interval 3903 - 3941.5 m in Danian age sandstone of the Rogaland Group. A total of 15.7 m was recovered from the three cores. MDT fluid samples were taken at 3903 m (gas), 3920.8 m (water), 3937 m (water), and 3952.2 m (gas).

The well was permanently abandoned on 4 October 2005 as a gas discovery.

TESTING

No drill stem test was performed.