



Wellbore History

GENERAL

Well 25/11-14 S was drilled centrally on the Balder Field on the Utsira High in the North Sea. This field was discovered in 1967 by the 25/11-1 well, and was the first well on the Norwegian shelf that proved oil. Well 25/11-14 S was planned to be completed for a long term test by the FPV Petrojarl 1. The well was planned deviated in order to avoid possible shallow gas at 235 m, 254 m, and 515 m. The main objective of this well was to test two Paleocene Heimdal Formation sands; the IB4 sand at 1863 m and the IB3 sand at 1897 m. The Heimdal Formation had previously proved oil-bearing in the three neighbouring wells 25/11-6, -7, and -8. Eocene sands constituted a secondary objective for testing. Based on data from surrounding wells, no abnormal pressure was expected. The surface location and well trajectory for this well, was designed so that a later plug-back and sidetrack to a horizontal completion could be accomplished.

OPERATIONS AND RESULTS

Appraisal well 25/11-14 S was spudded with the semi-submersible installation Byford Dolphin on 13 September 1990. During setting of the 30" casing a fatal accident occurred as one of the roughnecks was hit by the rig tongs and perished on the drilling floor. A 9 7/8" pilot was drilled with MWD from 189 m to check possible shallow gas. Sands were detected, but they contained salt water only. The planned deviation was initiated at 950 m. While POOH for coring the Heimdal Formation sand, the pipe became stuck (packed off by sloughing shales) and the well bore abandoned at a TD of 1908 m (1749 m TVD), 5 m into the target Heimdal Formation. The well was drilled with seawater down to 452 m and with KCl/polymer/gel mud from 452 m to TD.

The secondary target Eocene sands were not present. The IB3 sand came in at 1903 m (1746 m TVD RKB), but no wire line logs were run and no test performed due to stuck pipe. Strong shows in mud and cuttings were observed when entering the formation.

Five cores were cut in the prognosed IB4 sand in the interval 1859 to 1886 m. The cores recovered predominantly claystone with only thin stringers of sandstone, proving that the IB4 sand was in fact not present in the well. The sandstone stringers had good oil shows.

Since the well did not fulfil its main objective it was decided to make a sidetrack. The well bore below the 13 3/8" casing shoe was thus plugged back and abandoned on 13 October 1990 and a sidetrack (classified as a re-entry) was prepared.

TESTING

No drill stem test was performed

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/11-14 S