



Wellbore History

GENERAL

The re-entry 15/9-19 SR is a continuation of wildcat well 15/9-19 S, which was temporarily suspended at 3569.0 m (2394.0 m TVD RKB), immediately above the Heimdal sands. The target of the well was the Theta Vest Structure north of the Sleipner East Field. The primary objective was to test gas from the Heimdal reservoir, and to provide geological and reservoir data enabling optimal reservoir management. The secondary target was the Hugin/Skagerrak Sands, which were to be fully evaluated if hydrocarbon bearing.

OPERATIONS AND RESULTS

Well 15/9- 19 S was re-entered (15/9-19 SR) with the semi-submersible installation Treasure Prospect on 17 February 1993, from Slot 3 of the Loke Discovery template. The well was drilled to TD at 4641 m (3132.3 m TVD RKB) in the Triassic Skagerrak Formation. No significant technical problems were encountered in this well bore. The well bore was drilled with oil-based mud (Petrofree).

The Heimdal sandstone was penetrated at 3623 m (2427 m TVD RKB), 50 m low to prognosis. This Formation was the main target in the well. No hydrocarbons were encountered. The Hugin Formation was penetrated at 4317 m (2886 m TVD RKB), 2 m low to prognosis. The entire Hugin Formation was oil filled (18 m TVD). The core from this formation was filled with H2S (650 ppm). Sandstones of the Skagerrak Formation were water wet. No shows were recorded due to invasion of petrofree mud.

One core was cut from 3643 m to 3648 m in the Heimdal Formation, and two cores were cut from 4328 m to 4383 m in the Hugin and Skagerrak Formations.No fluid samples were taken.

The well was suspended on 29 March 1993 as an oil discovery.

TESTING

One Drill Stem Test from the interval 4316 to 4338 m in the Hugin Formation was performed. The test produced 680 Sm3 oil /day through a 12.7 mm choke. The GOR was 98 Sm3/Sm3, the oil density was 0.870 g/cm3, and the gas gravity was 0.740 (air =1)

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/9-19 SR