



Wellbore History

GENERAL

The purpose of the 6507/5-1 well was to test the Jurassic sandstones of the Donnatello prospect and potential Cretaceous sandstones. The prospect is located between the Norne and Heidrun fields, in the area of the Dønna Terrace in Nordland II, and about 200km off the coast of Helgeland in North Norway. The well was drilled to allow for future re-entry and re-completion as a producer.

OPERATIONS AND RESULTS

Well 6507/5-1 was drilled with the semisubmersible rig Maersk Jutlander. Water based mud was used down to 1065, oil based mud from there to TD. The well was spudded on December 24th 1997, and TD was reached March 7th 1998. The well reached a TD of 4224 m MD in the Early Jurassic Åre formation. Gas condensate and oil were discovered in Jurassic sandstones of the Fangst and Båt groups, as well as additional oil discovered in sandstones of the Cretaceous Lange Formation. Six cores were cut in the Garn, Not, Ile, and Ror Formations from 3392.5 to 3542.7 m RKB. Another three cores were cut in the Ror, Tofte, Tilje, and Åre Formations from 3562 to 3698.6 m. Thirteen MDT samples containing variable proportions of gas, oil, and mud filtrate were taken in the Lange, Garn, Ile, and Tilje Formations while four MDT samples containing water were taken in the Åre Formation. Following the discovery, Donnatello was renamed Skarv and the well was suspended as an oil and gas discovery.

TESTING

Before testing the well was cleaned and displaced to a Calcium Chloride brine. Three separate cased hole drill stem tests were run. Two tests were conducted in the Jurassic and one in the Cretaceous Lange formation. DST1 in the Jurassic Tilje formation produced 628 m3 oil with 109,804 m3 of gas per day through a 15.87mm choke. DST2a in the Jurassic Garn formation produced 178m3 of oil with 741,460 m3 of gas per day through a 15.87mm choke. DST2b from the Jurassic Garn and Ile formations combined produced 148m3 of oil and 580,560m3 of gas per day through a 12.70mm choke. DST3 in the Cretaceous Lange formation produced 925m3 of oil and 222,155m3 of gas per day through a 14.28mm choke.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/5-1