



Wellbore History

GENERAL

6507/5-2 was the third well drilled on the "A" fault block of the Skarv prospect. The well was planned as a down flank appraisal well of the 6507/5-1 Donnatello oil and gas discovery. The first well on the structure was the water wet 6507/6-2 well. The primary prospect lay in the Mid Jurassic sandstones of the Garn, Ile and Tilje Formations, with a secondary prospect in the Lower Cretaceous Lange sandstones. In the 6507/5-1 discovery well the Lange sandstones contained oil and the unit of interest was named the Gråsel prospect.

OPERATIONS AND RESULTS

Appraisal well 6507/5-2 was spudded on 13 August 1999 with the semi-submersible installation "West Alpha" and drilled to TD at 3897 m in Early Jurassic Åre Formation sediments. The well was drilled with seawater and hi-vis pills down to 1050 m, with "BARASILC" water based silicate mud from 1050 m to 1964 m, with "Environmul" oil based mud from 1964 m to 3623 m, and with KCl / Polymer mud from 3623 m to TD. The Tertiary and upper Cretaceous consisted mostly of claystones. The Lower Cretaceous section was dominated by claystones with thin sandstone stringers. The thickest sandstone in this interval was the Gråsel Lange sandstone, some 9 m thick. The well penetrated the Gråsel prospect down flank of the 6507/5-1 discovery. The top Jurassic consisted of Spekk Formation source rock and underlying Melke claystones. These claystones act as a seal for the underlying middle Jurassic sandstones. The Garn Sandstone of the Jurassic contained a gas water contact at 3650.5 m confirming one of the pre drilling models for the well. Oil was seen in a sidewall core, and log analysis and HGINJ data suggested well 6507/5-2 was still in the oil column. Residual oil shows were seen down to 3681.5 m in the Not Formation. The Ile and Tilje sandstones were both in the water leg. Three cores were cut in the interval 3626 m to 3810 m in the Garn, Not, Ile, Ror, and Tilje Formations. Several MDT runs were made to obtain fluid samples. A sample from 2990 m in the Lange Formation turned out to contain mud. Gas and condensate were sampled at 3615.5 m, 3637 m, and 3647 m in the Garn Formation. Water was sampled at 3651.5 m (Garn), 3658 (Not), and 3850 m (Tilje). The well was permanently abandoned as a gas and condensate appraisal 23 September 1999.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/5-2