



Wellbore History

GENERAL

Well 6406/6-1 was drilled on the Eta structure in the northwest corner of a block located just south of the Trestakk and Smørbukkk discoveries. The main objective was hydrocarbon accumulations in Middle Jurassic sandstones. The second objective was Early Jurassic sandstone. Total depth was to be in rocks of Triassic age in order to satisfy the licence commitment.

OPERATIONS AND RESULTS

Well 6406/6-1 was spudded with the semi-submersible installation Dyvi Stena on 15 August 1985 and drilled to TD at 4715 m in the Early Jurassic Tilje Formation. While setting the 9 5/8" casing several problems occurred, starting with difficulties in setting and testing the seal assembly, followed by leakage of the failsafe valves and failure of the BOP acoustic system. This resulted in a total loss of 28 days. The drilling proceeded to 4715 m, and the 7 m liner was run to 4696 m. Further problems, loss of several pieces of equipment in the hole and evaluation of the logs, resulted in the NPD approving the operators request to plug the hole 460 meter short of the prognosed depth. The well was drilled with seawater and hi-vis pills down to 333 m, with gel/seawater from 333 m to 965 m, with gypsum/lignosulphonate mud from 965 m to 4165 m, and with lignite/lignosulphonate from 4165 m to TD.

Traces of hydrocarbons were indicated at ca 3900 m in thin beds of sand stone of Early Cretaceous age. Sandstones were encountered in the Early - Middle Jurassic (Garn Ile and Tofte Formations). No hydrocarbons were observed in the Garn Formation. Weak oil shows were seen in the Ile and Tofte sandstones.

Only one core was cut in the top of the Garn (former Tomma I) Formation. RFT sampling was attempted but all samples failed to recover formation fluid either due to plugging or to seal failure.

The well was permanently abandoned on 30 December 1985 as a dry well with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6406/6-1