



Wellbore History

GENERAL

Well 7119/12-4 was drilled on the Lunde prospect between the south western end of the Hammerfest Basin and the Troms Basin, in the vicinity of the Ringvassøy-Loppa Fault Complex. The primary objective was to prove economic volumes of hydrocarbons in the Middle Jurassic Stø and Nordmela Formations. The secondary objective was to evaluate the prospectivity in the Early Jurassic to Late Triassic Tubåen, Fruholmen and Snadd Formations. TD of the well was planned in the late Triassic Snadd Formation.

OPERATIONS AND RESULTS

A 9 7/8" shallow gas borehole (7119/12-U-1) was drilled down to setting depth of the 13 3/8 casing at 1150 m MD to check for shallow gas. No shallow gas was observed and the shallow hole was cemented back. The rig was moved a few meters to the main well location. Wildcat well 7119/12-4 was spudded with the semi-submersible installation Polar Pioneer on 12 January 2011 and drilled to TD at 2917 m in the Late Triassic Fruholmen Formation. Due to hard and consolidated formation drilling progress was slow, but otherwise no significant problem was encountered in the operations. The well was drilled with seawater and hi-vis pills down to 1152 m and with KCl/Gem/Polymer mud from 1152 m to TD.

Well 7119/12-4 penetrated sediments ranging from recent to late Triassic. The well was dry. Weak hydrocarbon shows were seen at 1850 - 1873 m in the Kolje and Knurr Formations of early Cretaceous age. There were few indications of hydrocarbons while drilling the reservoir section. Few shows were seen in cuttings and the returned gas and the resistivity log response were relatively low. The gas values increased slightly with the penetration rate and while drilling through thin Coal layers in the interval from Nordmela to Fruholmen Formation. Except from rare and very weak shows observed in the Stø Formation, no hydrocarbon shows were observed on the drilled cuttings. However, 9 sidewall cores from 2300 to 2483 m had shows of residual oil.

No cores were cut but 23 full recovery sidewall cores were taken, covering all the formations in the interval from Hekkingen to Fruholmen Formations. No wire line fluid samples were taken.

Due to the absence of hydrocarbons, and the slow drilling progress, TD of the well was set shallower than planned in the Fruholmen Formation. The well was permanently abandoned on 17 February 2011 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7119/12-4