



## Wellbore History

### GENERAL

Well 30/10-3 was drilled on the Odin Discovery just north of the Frigg area. The main objective was to evaluate the Early Eocene sand ("Frigg Field Clastic Tongue") and appraise the 30/10-2 Odin gas Discovery.

### OPERATIONS AND RESULTS

Appraisal well 30/10-3 well was spudded with the semi-submersible installation Drillmaster on 8 August 1974 and drilled to TD at 2255 m in sands of the Paleocene Hermod Formation. Some anchor problems were experienced due to the sandy sea floor; otherwise no drilling problems were encountered during the operations. The mud used was a seawater, lignosulphonate system.

Cuttings from 177 m to 704 m (Pliocene-Miocene undifferentiated) consisted of sand and shells (coquina). From 704 m to 1213 m (Oligocene) the section consisted of sand, coquina and traces of lignite between 780 m and 1213 m. From 1213 m to 1594 m the section is grey shale with stringers of thin micritic limestone. From 1594 m to 1823 m the section is predominantly grey shale with minor traces of micritic limestone. From 1824 m to 2030 m a green shale unit is present. At 2030 m (Top Frigg Clastic Tongue) the lithology changed to sand and continued to a depth of 2073 m. From 2073 m to 2182 m the section consisted of red brown shales and sands. From 2182 m to TD (Paleocene) the section is predominantly sand with some thin grey shales.

The Paleocene sand was void of hydrocarbon shows. The Frigg Clastic Tongue was 43 m thick. Logs and cores indicated approximately 24 m of this interval contained oil and gas down to an oil-water contact at 2054 m. Net pay was 18 m of which 14 m was good clean gas sand and 4 m oil sand.

Six cores were cut from 2010 m in the "Green shale unit" down to 2064 m, 34 m into the Frigg sand. Eight Formation Interval Test (FIT) fluid samples were recovered from four different depths in the Frigg sand. A sample from 2068.1 m 9.75 l water and 0.5 l mud; a sample from 2052.8 m contained 0.6 cf gas and 1.25 l oil; a sample from 2049.2 m contained 1 cf gas and 0.4 l oil; and a sample from 2040.6 m contained 32.5 cf of gas. The well was permanently abandoned on 31 August 1974 as an oil and gas appraisal well.

### TESTING

No drill stem test was performed

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 30/10-3