## **Formation Tops Wellbore History** Groups NORDLAND GP TOP **GENERAL** Well is located east of the Statfjord Øst field and west of the Vigdis and Tordis Fields in the Tampen area in the Northern North Sea. The main objective of the well was to prove presence of sandstone and hydrocarbons in the Draupne Formation. The wells earlier drilled in the H-Area, 34/7-21, -21 A in H-Sentral and -23 S and -23A in H-Vest, proved oil bearing Late Jurassic Intra Draupne Formation sand. The discoveries in H-Sentral and H-Vest were however not in direct pressure communication. Well 34/7-24 S was drilled in a structural low compared to the other wells in the area and was mainly designed to test the continuity of the discovery made in H-Vest 34/7-23 S&A. The 34/7-24 S well was prognosed to penetrate top reservoir 63 m below the deepest penetrated ODT in the area. No OWC had been proved in the H-Area and the 34/7-24 S well was placed structurally relatively deep in order to possible reach an OWC in case of a sand bearing top Draupne interval. Secondary objectives of the well were possible gravity deposited sandstones within the Middle and Lower Draupne Sequences 1000 UTSIRA FM TOP HORDALAND GP TOP **OPERATIONS AND RESULTS** Well 34/7-24 S was spudded with the semi-submersible installation Vildkat Explorer on 25 February 1995 and drilled to TD at 3145 m (2938 m NO FORMAL NAME TOP NO FORMAL NAME TOP TVD) 54 m TVD into Late Jurassic sediments of the Heather Formation. Due to the nearness to the Snorre-Statfjord pipeline at the target position NO FORMAL NAME TOP the well had to be drilled deviated. The distance between the spud and the target position at Base Cretaceous level was approximately 900 m. The inclination was built from vertical to 28 deg through the 12 1/4" NO FORMAL NAME TOP section from 335 m to 1296 m. Operations went without significant problems. The well was drilled with spud mud down to 1296 m, and with a pseudo-oil based mud system (NOVAMUL) from 1296 m to TD. There was interpreted possible shallow gas from the MWD logs between 361 to 365 m. TD (m) The zone did not show anything on the ROV or at the flow check. The Nordland and Hordaland Groups consisted mainly of silty claystones except for the sandy Utsira Formation, which came in at 926 m MD (905 m GP TOP **BALDER FM TOP** TVD). The Nordland and Hordaland Groups had the highest content of LISTA FM TOP drilling gas in the well (0.1-0.8), but no signs of gas were seen on the logs, except for the already mentioned shallow gas level. The Rogaland Group was penetrated at 1861 m (1727 m TVD), and consists of the Balder 2000 Formation and the Sele/Lista Formation. The Balder Formation was SHETLAND GP TOP JORSALFARE FM TOP dominated by tuff interbedded with claystone. The Sele/Lista Formation consisted of silty claystones with traces of limestones. There were some weak hydrocarbon shows from 1870 to 1910 m. At 2065 m (1904 m TVD) the Shetland Group was penetrated. The Shetland Group consisted predominantly of silty claystones with some limestones and thin sandstone beds. The Cromer Knoll Group had marl as the main lithology. The marl was interbedded with silty claystones. The Viking Group top reservoir, came in at 2928 m (2721 m TVD) and consisted of claystones KYRRE FM TOP interbedded with only minor sandstone beds. No cores were cut. No wire line pressure or fluid samples were taken since no sand was encountered. The well was permanently abandoned on 24 March 1995 as a dry well. **TESTING** No drill stem test was performed. CRANGER KNOLL GP TOP BYRKER FINITION POP 3000 **HEATHER FM TOP**