Formation Tops Groups NORDLAND GP TOP <mark>HO</mark>RDALAND GP TOP 1000 FRIGG FM TOP 2000 GP TOP BATER BATED ER PM SS TOP **BALDER FM TOP** HERMOD FM TOP LISTA FM TOP VÅLE FM TOP SHETLAND GP TOP JORSALFARE FM TOP

Wellbore History

GENERAL

Well 25/1-7 was drilled on the main Frigg structure close to the UK border. The Frigg Field was discovered by well 25/1-1 in 1971. Production from the field started in 1977. A main objective of well 25/1-7 was to establish a reference monitoring station for the production of gas from the Frigg Field. The objective of the re-entry 25/1-7 R2 was to record the fluid contacts.

OPERATIONS AND RESULTS

Semi-submersible installation West Vanguard arrived the 25/1-7 location on 3 May 1988. Three days were spent on repairing damage on the ROV and clearing off fishing net that was entangled in a rail nearby the well head. Appraisal well 25/1-7 R2 was connected and re-entered on 7 May 1988.

The well was logged (2050 - 1910 m) through casing with a Thermal Neutron Decay (TDT) log to determine the fluid contacts. The contacts found were: base of gas at 1925.4 m MSL, and top of highest water at 1930.2 MSL. No oil leg was observed. From this it was concluded: 1) the gas liquid contact has risen 1.8-3.6 m since 14 February 1987, and 22.6 m since pre-production level (1948.0 m MSL reference). This, compared with 11 m rise in the period 19 April 1985 to 14 February 1987, shows that the water rise is temporarily blocked by shale barriers; 2) The vertical sweep efficiency by water is 100%, which means that all gas-filled sands behind the front are swept.

The well was suspended on 10 May 1988 as a gas appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/1-7 R2