Formation Tops Groups NORDLAND GP TOP 300 400 500 600 700 800 **UTSIRA FM TOP** 900 NO FORMAL NAME TOP HORDALAND GP TOP NO FORMAL NAME TOP 1000 NO FORMAL NAME TOP NO FORMAL NAME TOP 1100 NO FORMAL NAME TOP NO FORMAL NAME TOP 1200 TD (m) NO FORMAL NAME TOP 1300 1400 GP TOP **BALDER FM TOP** 1500 · LISTA FM TOP 1600 SHETLAND GP TOP JORSALFARE FM TOP 1700 KYRRE FM TOP **DUNLIN GP TOP COOK FM TOP** 1800 1900 AMBTADSEM FAPTOP 2000 STATFIORD GP TOP NANSEN FM TOP 2100 **RAUDE FM TOP HEG**RE GP TOP LUNDE FM TOP 2200

Wellbore History

GENERAL

Well 34/10-7 R is a re-entry of well 34/10-7 on the eastern segment of the Gullfaks Field. Well 34/10-7 found oil in the Cook and Statfjord formations and performed a drill stem test from the Cook Formation. The objective of the re-entry was to perform two more drill stem tests in the main reservoir, the Cook Formation.

OPERATIONS AND RESULTS

Well 34/10-7 was re-entered with the semi-submersible installation Ross Isle on 31 May 1983.

No wire line fluid samples were taken. Cores were cut in the primary well bore.

After testing the well was permanently abandoned on 14 July 1983 as an oil and gas appraisal well.

TESTING

The Cook Formation was perforated and tested at two levels.

DST 2 tested the interval 1833.4 to 1863.4 m. Towards the end of the main flow it produced 812 Sm3 oil and 99 000 Sm3 gas /day through a 40/64" choke. The GOR was 123 Sm3/Sm3, the oil density was 0.826 g/cm3 and the gas gravity was 0.68 (air = 1). The maximum temperature recorded at perforation depth was 76.2 deg C. After production testing DST 2 included also a seawater injection test and a seawater with surfactant injection test. Injection rates of up to 1600 m3/day of seawater were recorded during the final stages of the injection sequence. Due to fracturing of the reservoir during the first phase of injection no conclusions regarding the effects of the surfactant in the second phase could be made.

DST 3 tested the interval 1807 to 1821 m. Towards the end of the main flow it produced 829 Sm3 oil and 110500 Sm3 gas /day through a 32/64" choke. The GOR was 133 Sm3/Sm3, the oil density was 0.829 g/cm3 and the gas gravity was 0.68 (air = 1). The maximum temperature recorded at perforation depth was 73.3 deg C.