## **Formation Tops Groups** NORDLAND GP TOP **GENERAL** 400 BAKKEN GP TOP TORSK FM TOP 500 Stø-formation. **OPERATIONS AND RESULTS** 600 700 800 900 NYGRUNNEN GP TOP **KVITING FM TOP** ADVENTDALEN GP TOP KOLMULE FM TOP 1000 1100 1200 1300 1400 discovery. TD (m) **TESTING** 1500 performed. 1600 1700 KOLJE FM TOP 1800 1900 2000 KNURR FM TOP 2100 **HEKKINGEN FM TOP** 2300 KAPP TOSCANA GP TOP STØ FM TOP NORDMELA FM TOP 2400 TUBÅEN FM TOP FRUHOLMEN FM TOP

2500

## **Wellbore History**

Well 7121/5-2 is located ca 10 km northeast of the Snøhvit Field. The purpose of the well was to test the hydrocarbon accumulation on the Beta-structure in sandstones of the Early to Middle Jurassic Stø-formation.

The well was spudded with the semi-submersible installation Ross Isle on 26 May 1986 and drilled to TD at 2543 m in Late Triassic sediments (Rhaetian age). The well was drilled with seawater and hi-vis pills down to 850 m, with gypsum/polymer mud from 850 m to 1977 m, and with gypsum/polymer/NaCl mud from 1977 m to TD.

Hydrocarbon bearing Middle Jurassic sandstones in the Stø Formation were encountered at 2323 m. The gas-bearing zone extends from 2323 m to 2346 m. The gas zone is sealed from the underlying oil zone by a 6 m thick dense shale layer, which prevents the exact location of a gas/oil contact. The oil-bearing zone extends from 2352 m 2358.5 m. The oil water contact at 2358.5 m was picked both from logs and core data. Three cores were cut in the Stø formation (2324 m to 2400 m). A total of 9 FMT runs were performed; two to obtain pressure points and 7 to obtain segregated samples. The first run resulted in 32 pre test pressure points out of 38 attempts, in the interval 2323.5 m to 2369.0 m. Eighteen points were taken in the gas zone, 6 in the tight zone, 4 in the oil zone and 4 were in the water zone. The second run resulted in 9 pre test pressure points of nine attempts in the interval 2358 m to 2361 m. Seven attempts to obtain segregated samples resulted in 5 good samples, two at 2355 m, one at 2326 m, and two at 2353.5 m.

The well was permanently abandoned on 6 June 1986 as an oil and gas discovery.

Due to the presence of hydrogen sulphide in the well, no tests were performed.