



## Wellbore History

### GENERAL

Well 31/2-2 was drilled some 4 km east of the discovery well 31/2-1 on seismic line 79-416 at SP 200. The concession requirement for the wells were complete penetration of the prospective Jurassic sequence and terminate in Triassic or older. The particular objectives of well 31/2-2 were: to evaluate lateral variation of reservoir parameters eastwards on the flank of the structure: to test the zone of oil shows seen in 31/2-1 in better reservoir conditions, to test the gas accumulation in a down-dip location: to evaluate the nature of the seismic flatspot, and to provide geological calibration of seismic reflectors above the reservoir for improved regional evaluation.

### OPERATIONS AND RESULTS

Well was spudded with the semi-submersible installation West Venture on 27 February 1980 and drilled to TD at 1857 m in the Middle Jurassic Krossfjord Formation. The 36" hole was drilled without incident to 433 m using seawater with viscous pills spotted on connections. From 422 m to 433 m hard drilling was experienced. This was interpreted as a boulder bed similar to that found at a comparable depth in the previous 31/2-1 well. Problems were encountered with the stability of the temporary guide base, and the well had to be abandoned. The rig was moved NE 25 m and re-spudded on 29 February. The well was drilled with seawater and hi-vis pills down to 800 m, and with gypsum/lignosulphonate mud from 800 m to TD.

Top reservoir (Sognefjord Formation) came in at 1544 m and was gas bearing down to a gas/oil contact at 1579 m, and oil-bearing from 1579 m down to an oil/water contact at 1591 m. Both contacts were clearly defined on logs, the gas/oil contact was confirmed by RFT pressure gradients, and moveable oil was confirmed by RFT sampling at 1587.5 m and 1590 m. Gas samples were obtained from 1548 m and 1571 m. Weak oil shows began at 1561 m in the gas zone, strong shows with stained and bleeding cores and a paraffinic smell were observed in the oil zone. Oil shows ceased at 1602 m.

Coring started at 1515 m in the Draupne Formation and terminated below the oil-water contact. A 120 m interval was cored with 94.2 m of core in 13 cores recovered at surface.

After coring and logging of the Late Jurassic sandstones the well was suspended at the 9 5/8 casing shoe and the rig towed to Bergen for inspection and repairs on 22 April 1980.

### TESTING

No drill stem test was performed

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 31/2-2