Groups Formation Tops

Wellbore History

NORDLAND GP TOP 1000 <mark>HO</mark>RDALAND GP TOP 2000 TD (m) GP TOP KROFISK FAPTOP SHETLAND GP TOP 3000 TOR FM TOP **HOD FM TOP** BLODØKS EM TOP CROMER KNOLL GP TOP REDURY FM TOP **ASGARD FM TOP** 00000 000000 000000 otane engage MANDAL FM TOP FARSUND FM TOP

VESTLAND GP TOP

4000

ULA FM TOP

NO GROUP DEFINED TOPSKAGERRAK FM TOP

Appraisal well7/8-5 S was drilled on the Krabbe discovery, made by the 7/8-3 well in 1983. That well encountered 43 m gross Ula Formation, oil-bearing throughout, with oil down to the base of the reservoir. Two DSTs were conducted with the upper test flowing 207 Sm3 oil/day. The 7/8-3 well drilled close to the interpreted crest of the structure. The objective of the appraisal well was to drill down-dip in order to constrain or encounter the oil-water contact and determine if reservoir thickness and quality improved down-dip of the discovery well. The data would establish if commercial volumes were likely in the Krabbe pool and if a PDO would be submitted.

OPERATIONS AND RESULTS

Well 7/8-5 S was spudded with the jack-up installation Mærsk Giant on 18 April and drilled to TD at 4168 m (4127 m TVD RKB). The top hole was drilled down to 750 m where shallow gas influx led to a re-spud. The well was drilled vertical down to 1300 m, then building angle to maximum 16 deg at 1700 m, then falling off to a nearly vertical path from about 2500 m and down to TD. It was drilled with seawater and bentonite/KCl polymer down to 1220 m and with Environmul oil based mud from 1220 m to TD.

The top of the reservoir was picked at 3950 m (3912 m TVD RKB), 36 m deeper than prognosed, and was 71 m thick, 3 m thinner than expected. Because the reservoir was found so much deeper the well drilled into water. No oil water contact was thus found, but from the pressure data and the fluid properties an OWC as deep as 3880 m TVD RKB was estimated. No oil shows were recorded in the well other than a moderate blue-white crush cut fluorescence in the Mandal Formation.

No sidewall or conventional cores were cut in the well. Pressure points taken from 3967.6 m to 4020.2 m (Ula Sandstone) varied from 9657 to 9527 PSIA - 1.59 to 1.60 SG SS. An MDT fluid sample taken at 4018.3 m recovered 2.2 l water.

The well was completed with a 7" liner across the reservoir and was suspended for future use as a water injector. It was abandoned on 12 June 2006 and classified as dry.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7/8-5 S