



Wellbore History

GENERAL

Well 6507/2-4 was drilled on the Marulk structure on the Dønna Terrace in the Norwegian Sea. The main purpose was to appraise the Lysing Formation discovery in the previous well 6507/2-2, and to confirm the reserves down flank. Lange Formation (Intra Lange sandstones UL2 and UL1) was the secondary target. Planned TD was set 50 m into the Jurassic.

OPERATIONS AND RESULTS

Appraisal well 6507/2-4 was spudded with the semi-submersible installation West Alpha on 17 November 2007 and drilled to TD at 3600 m in the Early Cretaceous Lyr Formation. Operations proceeded without really serious problems, but in the 12 1/4" and 8 1/2" sections a considerable amount of time was NPT due bad weather conditions and hole instability with tendency of stuck BHA. Due to very low rate of penetration it was agreed among the License Partners to set TD in the Cretaceous Lyr Formation. The well was drilled with sea water and hi-vis sweeps down to 1350 m and with Ultradril mud from 1350 m to TD.

All stratigraphic tops were encountered generally 10-27 meters higher than expected; Lysing formation was found 10.4 m higher than prognosed, UL2 sandstone 14.5 m deepest and UL1 sandstone was hit 19 m higher. The primary target Lysing sandstone was found at 2832 m and was found Gas/Condensate bearing all through down to a GDT at 2853 m. Unit UL2 was found water bearing at 3331.5 m, composed by many sand layers interbedded with claystone. Unit UL1 was found at oil bearing at 3378.5 m, consisting in one sand body 3 meters thick. Oil shows and gas peaks were recorded in numerous thin sandstone stringers in the Lange Formation between 3320 m and 3465 m.

One core was cut from 2835 to 2852 m in the Lysing Formation, and two cores were cut in the interval 3334 to 3344.8 m in the Lange Formation. MDT gas/condensate samples were taken at 2838 m and 2850 m in the Lysing Formation, water was sampled in the intra-Lange Formation UL2 level at 3337 m, and oil in the intra-Lange Formation UL1 level at 3380.5 m.

The well was permanently abandoned on 19 February 2008 as a gas/condensate appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/2-4