

Wellbore History

GENERAL

The 6406/12-3 S, 6406/12-3 A, and 6406/12-3 B wellbores were drilled in concert on the Pil and Bue prospects in the southern end of the Halten Terrace in the Norwegian Sea. The S and A wells were planned to target the Pil and the Bue prospects, respectively. The first well, 6406/12-3 S tested 1017 Sm3 oil/day with a GOR of 160 Sm3/Sm3 in Intra Melke Formation sandstones. This result led to the decision within the partnership to drill an appraisal of the Pil discovery. The well was designated 6406/12-3 B and was designed to test the Intra Melke Sandstone reservoir encountered along strike from 6406/12-3 S.

OPERATIONS AND RESULTS

Appraisal well 6406/12-3 B was kicked off at 2355 m in well 6406/12-3 S on 2 May 2014. It was drilled with the semi-submersible installation Transocean Arctic to 4315 m in Late Jurassic sediments belonging to the Melke Formation. No significant problem was encountered in the operations. The well was drilled with XP-07 oil based mud from kick-off to TD.

At the top of the Jurassic section, the well encountered a different stratigraphy from the 6406/12-3 S well. Immediately below BCU, a 35 m MD Spekk/Rogn/Spekk succession was penetrated. Hydrocarbons were present within these rocks but not moveable. Below the Spekk Formation, at 3761 m (3440 m TVD), the well encountered over 500 m of Intra Melke Formation sandstones. These sands are interpreted to contain similar facies as those encountered in the 6406/12-3 S discovery immediately below the BCU. The Intra Melke sands contained an 82 m oil column in very good to excellent quality reservoir sandstone with an oil-water contact at 3844 m (3522 m TVD), 18 m deeper than in the 6406/12-3 S well. Pressure data confirmed the same oil gradient as in 6406/12-3 S. There was no gas cap. A second hydrocarbon column of 10 m was seen approximately 360 m below the oil water contact.

A total of 165 m core was cut and recovered in three cores in the interval 3703 m to 3868 m. The cores captured rocks from the cap rock (Lyr Formation marls), the Spekk and Rogn formations, and the Intra Melke Formation reservoir sandstones. Fluid samples were taken at 3776 m (oil), 3836.5 m (oil), 3892.1 m (water), and 4082.4 m (water).

The well was plugged back to the 13 3/8" casing and permanently abandoned on 11 June 2014. It is classified as an oil appraisal well.

TESTING

No drill stem test was performed.