

Wellbore History

GENERAL

Well 6507/3-8 was drilled on the Gjøk prospect between the Alve and Norne Fields on the western flank of the Nordland Ridge in the Norwegian Sea. The well objective was to prove economical HC volumes in the Fangst and Båt groups and to secure the necessary data for a future development and tie-back to the Norne field

OPERATIONS AND RESULTS

Wildcat well 6507/3-8 was spudded with the semi-submersible installation Ocean Vanguard on 9 November 2009 and drilled to TD at 2990 in the Early Jurassic Tilje Formation. No significant technical problem was encountered in the operations. The well was drilled with seawater and sweeps down to 1303 m and with Performadril WBM from 1303 m to TD. No shallow gas was observed.

The well penetrated Tertiary, Cretaceous, and Jurassic formations. Top Jurassic, Spekk Formation was encountered at 2534 m. A 142 m thick gas column was proven in Not, Ile and Tofte Formations and a 9.5 m thick oil column in Tofte Formation. The Not Formation was penetrated at 2693 m which was 6 meters deeper than prognosed, but the three main reservoir levels were 32 m thicker than prognosed. The gas-oil contact was proven at 2835 m and the oil-water contact at 2844 m. No oil shows were recorded outside of the hydrocarbon bearing reservoir in the well.

Five cores were cut, one in the Not Formation, one in the Ile Formation, one across the Ile/Tofte formation boundary and two in the Tofte Formation. MDT pressure measurements were collected in Not, Ile, Tofte and Tilje formations. The sandstones had good reservoir properties, and pressure measurements of good quality were achieved. The reservoir fluids were gas, oil and water. The gas zone was divided into two different pressure regimes with a pressure difference of approximately 0.5 Bar between the Not and the Ile/Tilje formations. Gas samples were collected at 2694.5 m and 2796 m in the Not and Tofte formations. Oil samples were collected at 2842.5 m in the Tofte oil zone. A water sample was collected at 2872 m in the Tilje formation. The water sample was collected in the same pressure regime as the hydrocarbons above. All hydrocarbon samples were collected with low drawdown and had good quality. The water sample contained approximately 10% mud filtrate, but is regarded to have reasonable quality.

The well was permanently abandoned on 15 December 2009 as an oil and gas discovery

TESTING

No drill stem test was performed.