Integration of 4D Seismic Data and the Dynamic Reservoir Model - Revealing New Targets in Gannet C

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Abstract

Two sets of 4D seismic data gave major new insights into the structure and dynamic behaviour of the Gannet C oil and gas reservoir in the UK Central North Sea. The 4D data revealed major extensions of reservoir units previously presumed to be absent or thin over much of the reservoir. Furthermore, in a subsea field with significant uncertainty of production allocation, 4D also proved an invaluable history matching parameter for the dynamic model. Together, the dynamic model and the 4D data gave rise to the identification of one recompletion opportunity and two infill well opportunities, to produce oil volumes in existing and newly identified reservoir sands.