Detailed Depositional Resolutions in Upper Miocene Sands of HT-3X Well, Nam Con Son Basin, Vietnam

Authors : Vo Thi Hai Quan

Abstract : Nam Con Son sedimentary basin is one of the very important oil and gas basins in offshore Vietnam. Hai Thach field of block 05-2 contains mostly gas accumulations in fine-grained, sand/mud-rich turbidite system, which was deposited in a turbidite channel and fan environment. Major Upper Miocene reservoir of HT-3X lies above a well-developed unconformity. The main objectives of this study are to reconstruct depositional environment and to assess the reservoir quality using data from 14 meters of core samples and digital wireline data of the well HT-3X. The wireline log and core data showed that the vertical sequences of representative facies of the well mainly range from Tb to Te divisions of Bouma sequences with predominance of Tb and Tc compared to Td and Te divisions. Sediments in this well were deposited in a submarine fan association with very fine to fine-grained, homogeneous sandstones that have high porosity and permeability, high- density turbidity currents with longer transport route from the sediment source to the basin, indicating good quality of reservoir. Sediments are comprised mainly of the following sedimentary structures: massive, laminated sandstones, convoluted bedding, laminated ripples, cross-laminated ripples, deformed sandstones, contorted bedding.

Keywords : Hai Thach field, Miocene sand, turbidite, wireline data

Conference Title : ICGS 2017 : International Conference on Geology and Sedimentology

Conference Location : Havana, Cuba

Conference Dates : November 23-24, 2017

1