Genetic Types of Paleogene Slope Break Zones and Their Controls on Depositional System in Bohai Offshore Area

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The structure evolution in Bohai sea area has the characteristics of multiphase rifting, multicyclic superimposition and multiple geneses. It is the complicated and ordered fault system with different time, different size, different attitude and different attribute in the Bohai sea area in Palaeogene to make the slope break zone in the basin is very characteristic. The slope break zone in Paleogene in Bohai sea area are divided into 4 types, viz. extensional boundary faulted slope break zone, strike-slip boundary faulted slope break zone, depositional slope break zone and basement antecedent topographic slope break zone according to the geneses, the plane combination styles and the differences of sedimentary facies control. The sand-control characteristics of different slope break zone are different. The slope break zones in continental fault basin are the main location in which the sandstone is rich. But this doesn't draw a conclusion that the sand body must be found if there is slope break. The matching of "hill (availability provenance)-canyon (clastics transit pathway)-slope (slope break zone)-boundary (sequence boundary)" is the necessary condition of the sandstone enrichment in continental fault basin.