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The Sequence Research of Cretaceous of Tabei Uplift of Tarlim Basin

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Western Tabei is the area where Cretaceous Stratigraphy developed well, many sites of display of oil and gas were found. based on the comprehensive study of core from drilling wells and data from field trip and sedimentary facies, according to principle of sequence stratigraphy, we classify the Cretaceous into two subsequence of third class and 5 subsequence of forth class,, combined with sedimentary facies analysis and data of oil and gas exploration ,we determined beneficial zone further thinking for exploration potential. Tarlim basin is a large size of complex basin developed on the ground of plate (Jia chenzao, 1992). Tabei uplift located in the northeastern part of the tarim basin, between Kuche depression and northern depression, with striking W-E. It is a large arc uplift cipling to north, with area of $3.66 \times 10^4 \text{ km}^2$, its developing period is from late early Paleozoic Era to early late Paleozoic Era. early late Paleozoic Era to end of Trassic belonged to formational period., with development of faults and horsts, Cenozoic Era is time for subsidence. We finish the following job: (1). Frame building of sequence and single well facies analysis. Field trip section observation, combined with drilling core data, we give the third class sequence scheme and system tract scheme, based on the analysis of typical well, by the method of Fisher point diagram , well logging curve analysis, particle size distribution, lithology and facies analysis, we determined the third class sequence and system tract analysis, combined the seismic-well analysis, summarized the corresponding relationship between seismic data and well data. We recognized the third class sequence, every sequence can be lassified into low system tract and transgressive system tract and high system tract and regression system tract. (2). Building of seismic sequence frame; Based on the union section of seismic line and well drilling, we investigated the corresponding relationship

between seismic reflective and subfacies, and surmorized the stratigraphy relationship, concluded that the beneficial zone is on the transformation axial of northern structure and southern structure. (3). research of sedimentary facies; Integrating of field trip and drilling core observation , we analyzed the subfacies of system tract, determined the sedimentary facies of Yagelimu Formation is alluvian fan, covered by braid channel and transient sheetflood sedimentation. The Shushehe Formation is classified into trasgressive system tract and high system tract, based on the basis of first flooding surface and maximum flooding surface, which can be regional cap , delta front can be reservoir bed. Baxigai Formation, sandbody of delta front can be main reservoir, belonging to regressive system tract of sequence I. Bashijiqike Formation belonged to low system tract of sequence II, with the sedimentary facies belonging to front of braid delta, reservoir property is good. Dealing and count of heavy mineral data from 54 wells, combined with the sedimentary group and paleomorphology , burial hill distribution before sedimentation, input sourced material moving direction is determined from north. (4). Based on the sequence frame and sedimentary facies, we thought the delta front , braid channels in the middle fan and delta plain are the beneficial facies , and predicted the potential exploratory area, combined with the data of seismic line and sedimentary facies of system tract , the line of Yudong2-Yingmai23-Yingmai12-Yingmai321-Yingmai323-Hongqi2 is the symmetry axial of the north structure and south structure, the northern boundary line located at the line of Yingmai30-Yingmai33-Donghe25, southern boundary is at line of Yingmai31-Yingmai101-Donghe8, this is a beneficial zone , belonging to a slope , onlap can be found there, it is the beneficial zone for sequence I, i.e., Cretaceous stratigraphy.

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