

Identification of Subtle Oil/Gas Reservoir in Junggar Basin of West China

Gang Cai, Qingzhou Yao, and Shuangwen Li

Northwest Branch of PetroChina Petroleum Exploration and Development Research Institute,
Lanzhou, China.

The paper uses the spectral factorization technique, full 3-D visualization and full 3D data volume interpretation technique in such 3-D work zones as C43 well, G8 well and SN4 well etc (situated in the east part, northwest margin and hinterland of the basin respectively in Junggar Basin of West China), effectively predicting the spatial distribution of channel and lithologic body of reservoir and identifying the boundary and size of lithologic trap. A large scale of lithologic oil/gas reservoir in SN31 well was discovered after successful application of these three techniques, which provided a new idea for exploration of subtle oil/ gas reservoir in Junggar Basin. It is well worth notice that it should select appropriate interpretation approaches when study of subtle oil/gas reservoir, which can succeed.