

# **Petroleum Geological Features in Major Onshore Sedimentary Basins of China**

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A series of superimposed basins have been formed during several tectonic evolution cycles of the continental plates in China. In the western and central China, the Mesozoic-Cenozoic terrestrial foreland basins superimposed on the Paleozoic marine facies cratonic basins. The Palaeozoic over mature marine shales and Mesozoic coal measures formed the main source rocks, which provided the middle and lower stratigraphic intervals and the foreland fold-thrust belts with abundant natural gas. Lithostratigraphic and composite reservoir plays also occur widely in the upper and middle stratigraphic intervals of these basins. In the eastern China, Mesozoic-Cenozoic depressions and faulted basins are well developed.

Apart from the Changyuan anticline and some structural reservoir plays associated with major faults, lithostratigraphic and composite reservoir plays are widely distributed in the slopes and sags of the basins. It has been found that the hydrocarbon-rich depressions are characteristic of “sag-wide oil-bearing”. Therefore different exploration strategies and exploration technologies need to be carefully considered in accordance with the features of petroleum geology when exploring those sedimentary basins.