

## More than Triangle Diagram: Understanding Potential Shale Gas in China

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### Summary

The studies on triangle theory from Masters, Kuuskraa, Holditch and Martin show that the lower quality unconventional resource including in-place shale gas in the bottom position is a vast amount, but successful production of these resources great depends on both integrated technology and adequate prices. That means the huge resources cannot make sure economic success, for the lower permeability and recovery reservoir properties. Shale gas in China is the same story. Comparing mineral composition and pore types by triangle diagram to help us find brittle shale and large storage space capacity, there are also a similar kind of characteristics between productive shale reservoirs although hydrocarbon resources in different basins are unequally distributed.

In this paper, we will deeply understand the growth potential of shale gas in China in hierarchies for the effects of larger in-place resource, geologic setting and various technological and economic conditions on advancing activities, initial production and eventually contribute, under great active effort to increase the production and decrease the cost to face economic challenge in the long term, through the basic context of these triangle diagrams.



Fig. 1 Resource Triangle (Holditch, 2009)