

## **Unconventionals in the Middle East – Are You crazy?**

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### **Abstract**

The advent of Unconventionals over the last 10 years has fundamentally changed the oil and gas industry globally. As a consequence of maturing the new ultra-low permeability source rock plays first gas and then oil supply increased significantly only to subsequently lead to a decrease in commodity prices of 50% or more and to significant crisis in the industry. The epi-center for the technological breakthroughs and rapid application has been North America with the following key ingredients:

- Abundant availability of HC resources
- Technology breakthroughs (horizontal wells & well stimulation techniques)
- Venture money
- Existing infrastructure
- Qualified work force

Subsequently, Unconventionals have spread globally (Europe, South America, China, ...) albeit with varying success for different reasons. This keynote will look at three different aspects of Unconventionals in the Middle East:

- 1) Why on earth would we want to get into Unconventionals in the Middle East? What is the value if we have all that cheap conventional oil & gas? This part will highlight the strategic importance of Unconventionals for the energy supply of the region and to act as insurance for potential temporary production shortfalls.
- 2) Do we have the potential? Using both regional and - more focused - Abu Dhabi data sequences with unconventional potential are introduced and compared to US analogues. Key intervals discussed are the Late Jurassic and the Cenomanian intra-shelf basins with their thick source rock intervals.
- 3) Can we make it work? Economically? Finally, a picture is drawn that contrast issues (from water to infra-structure) with a vision of what potentially could be achieved using technology and rigorous planning.

In summary, the potential for Unconventionals (both oil and gas) is enormous in the Middle East. Unconventionals will potentially play a significant role in securing energy for the region and providing stability of supply, which is of strategic importance for all oil producing countries of the Middle East. However, realization of the potential with realistic economics will require a creative and bold approach to improve costs for drilling and infra-structure.