

Is Middle East Really Fully Explored?

Ahmad Saqer Al Suwaidi¹

¹ADMA-OPCO

Abstract

Middle East is one of the most prolific regions in the world in terms of crude oil production and it is expected to remain world leader from that perspective for several decades to come. With significant production from both off and onshore areas, stable political regimes, investment friendly environment, proximity to well-developed infrastructure and reasonable labor have contributed to relatively low capital and operating expenditures for E&P projects.

We all know that giant multibillion carbonate reservoirs in the Middle East were discovered with rudimentary G&G techniques over half a century ago. These giant reservoirs have been serving the respective nations with relentless copious supplies of crude oil and gas which have contributed significantly to the wellbeing of inhabitants of the region.

The E&P business is up for a challenge and countries of the region have started to realize this and started to frame policies as well as some action to meet these challenges. It is understood that, like other petroliferous basins of the world, the Middle East hydrocarbon reservoirs would inevitably be depleted. After all, fossil fuel is an exhaustible resource. Like other basins of the world, the basins of the Middle East too have reached its creaming curve where new finds are in ever decreasing reserves size. World's continued demand for fossil fuel and need to maintain or even enhance governments public spending would persistently put pressure on remaining reserves. Recent price fall may push governments to produce more to maintain governments spending on public affairs or reduce the production in anticipation that it may help in re-gaining oil price. Irrespective of what avenue governments choose to take one factor will remain constant and that is ever depleting reservoirs, their rate may however keep varying.

The cheap and easy to find & produce oil would continue to deplete and any new oil to be found would require application of innovative technologies in finding subtle traps, overlooked and bypassed reservoirs.

The Middle East is blessed with multitude of reservoirs, some of which may have been overlooked or of relatively poor quality traps. Countries of the region have started their focus on these reservoirs and such aging and deteriorating wells/completions. The deeper reservoir potentials known to have produced elsewhere and still present in undrilled areas at drillable depths can become targets of interest.

Recently, oil and gas have been produced from several reservoirs within developed fields that had not been tested previously. This is primarily due to the fact that large reservoirs are depleting and that focus would progressively be diverted towards relatively lower volumes and difficult to produce reservoirs.

We understand that unconventional prolific source rock play have potential to add significant volume to the portfolio. While the chance of success of finding significant oil and gas reserves from unconventional source rock play is high, this play will pose several challenges of its own. The cost of production would, at least initially, be very high and might be challenging for the environment. However, as it has been in the USA, the play if discovered and produced will also have a potential for reduced production cost given the learning curve and economy of scale is achieved over the shortest possible time. I and all of us believe that our region still has potential to deliver significant volumes of hydrocarbon from smaller, subtle and difficult to produce expensive reservoirs.