Hydrocarbon Potential and Trap Styles in the Deep Water Western Nile Delta, An Emerging Play

In 2002-2003 Apache Egypt and partners RWE DEA and BP drilled five wells in the deep water portion of the West Mediterranean Concession in Egypt's western Nile Delta. These wells established the presence of potentially commercial quantities of gas, gas condensate and oil in Tertiary aged reservoirs. Multiple trap styles and complex reservoir geometries are observed on high quality 3D seismic data sets recently acquired in the area of the discoveries. Hydrocarbons in this area are found in faulted anticlinal closures, stratigraphic and combination traps. Reservoir types include submarine slope channel-fan deposits in the Pliocene and fluvial-estuarine deposits in the Miocene. Effective utilization of seismic attributes and visualization techniques was critical to the early recognition and aggressive development of this important emerging play.