09/28/2016; 2:20PM

Margham Field -Dubai, United Arab Emirates An Exploration Success Story

Charles Goebel Banner Resources

Margham Field, located in the Emirate of Dubai, lies within the Oman Mountain Fold and Thrust Belt of the North Eastern Arabian Plate. The field was discovered in 1982 by ARCO International Oil & Gas Company as Operator for the East Dubai Onshore Concession Area. An exploratory mindset and new 2-D seismic data were key to locating the discovery well, which tested approximately 50 MMCFGD and 2500 BPD of condensate from Early Cretaceous Thamama Group shelf carbonates. Development drilling quickly demonstrated the limits of the seismic data; a shallow syncline formed by a decollement thrust zone was found to overly the productive anticline, and 40 degree dips were measured within the reservoir in flank wells. Fortunately, the Thamama and Wasia Group sediments were deposited prior to the thrust events, and their relatively consistent and cyclic stratigraphy made it possible to detect faults, fractures, and other important structural phenomena. At discovery, reservoired hydrocarbons were a retrograde gas -condensate, and produced gas was re-injected into the reservoir after liquids were extracted. This process maximized liquid recovery, and over 100 MMBbls of condensate were produced from the field.

