

by Sami Shaheen

EGPC (Egyptian General Petroleum Corporation)
Cairo, Egypt

The Petroleum Potential of Egypt and New Exploration Opportunities

Abstract

Since the onshore discovery of oil in the Eastern Desert in 1886, the petroleum industry in Egypt has discovered over 15.5 BBOE of reserves.

While the onshore Western Desert may contribute an additional 15-30 TCF in new future resources, the offshore Mediterranean may hold an additional 64-84 TCF above the 25 TCF already discovered, with many new fields in the giant class (>100 MMBOE). The current deep-water gas discoveries and activity are relatively unique worldwide and hence may require a substantial learning curve to understand how to drill, complete, develop and optimize deep-water gas reservoirs in a cost-effective manner.

The offshore Gulf of Suez may yield an additional 1.5-3.3 BBOE. Advances in seismic multiple suppression and development of new "off-structure" play concepts with higher quality seismic data should result in continual new pool discoveries.

Frontier exploration offshore includes the Red Sea rift Province, where deep water and sub-salt imaging remain significant challenges to overcome, and the Gulf of Aqaba.

More remote new exploration areas include the Komombo and other basins in Upper Egypt, currently under re-evaluation by a number of international oil companies.

Despite a relatively complex history, the geological framework of Egypt is highly suited for oil and gas exploration. It comprises eight major tectono-stratigraphic events:

- 1) Paleozoic craton
- 2) Jurassic rifting
- 3) Cretaceous passive margin
- 4) Cretaceous Syrian arc deformation and foreland transgressions

- 5) Oligo-Miocene Gulf of Suez rifting
- 6) Miocene Red Sea breakup
- 7) Messinian salinity crisis
- 8) Plio-Pleistocene delta progradation.

Each of these events has created multiple reservoir and seal combinations. Source rocks occur from the Paleozoic through to the Pliocene and petroleum is produced from Precambrian through Pleistocene age reservoirs.

Biographical Sketch:

MOHAMED SAMI SHAHEEN is Vice Chairman for Agreements & Exploration, and board member of EGPC (Egyptian General Petroleum Corporation), Egypt's Representative in the organization of Arab Petroleum Exporting Countries (OAPEC), Egypt's representative in Association Des Producteurs Petrole Africains (A.P.P.A.), He is also Chairman of Egyptian Petroleum Exploration (EPEX). He holds degrees in geology and chemistry from Ain Shams University, has held management and technical positions in industry, and has published many papers during his distinguished career in petroleum exploration.

Mr. Shaheen may be contacted at:
EGPC (Egyptian General Petroleum Corp.)
Palestine St., 4th Sector - New Maadi
Cairo, Egypt
Telephone: 011 (202) 518-5019-17
Fax: 011 (202) 706-5359 - 5274
Email: egpcexp@starnet.com.eg

Please consult the EGPC website for background on the oil and gas business in Egypt and some details of the plays and prospects available in the upcoming new tender: www.egpc.com.eg. □