

Egypt's Future Petroleum Resources: A Revised Look into the 21st Century - With Emphasis on Northern Egypt and the Offshore Mediterranean

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ABSTRACT

Egypt has a statistical yet-to-find in excess of 37 BBOE (218 TCF). At least 12 major tectonostratigraphic events control a multitude of trapping styles and petroleum systems. Source rocks span Paleozoic through Miocene ages and reservoirs are productive from Basement to Pleistocene. Future significant conventional resource additions will largely come from either semi-isolated basins in Upper Egypt or the Red Sea, or from deeper pools in the Western Desert and Nile Delta. Substantial unconventional resources may come primarily from the Abu Gharadig Basin Abu Roash Formation and perhaps the Gulf of Suez Thebes and Brown Limestones.

In this paper, we explore the geological setting of Northern Egypt's plays, exclusive of the Gulf of Suez, Red Sea and Upper Egypt basins. We stress an emphasis on the deeper petroleum systems and new insights from new regional mapping, geochemical and seismic data. Jurassic and Cretaceous rift systems extend from the Western Desert north and northeastward under the Nile Delta and into the Levant Basin. This extension of the Mesozoic petroleum system is significant, and may provide the ultimate deep potential in the offshore Mediterranean.