شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

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Reservoir characterization and hydrocarbon potentiality of Simian field, offshore Nile Delta, Egypt.

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Abstract

Simian Field is a Pliocene gas field located in the eastern part of West Delta Deep Marine area, Mediterranean sea, Egypt, approximately 120 km North-East of Alexandria, Egypt, in water depths ranging between 900 and 1000m. The field, covers an area of about 200 km^2.

In the Nile Delta province, there is a challenge of characterizing the reservoir rock, so this study will focus on the study of general geological setting and structure setup in Simian field, north western margin of the Nile Delta, in addition to study the Petrophysical , Sedimentological and environmental characteristics of the upper Pliocene reservoir rocks in Simian field. Such studies are intended to improve the process of reserve estimation and de-risking hydrocarbon exploration and development of the study area .

The study includes calculation of petrophysical parameters for Simian reservoir rocks using advanced logging tools , conventional logging tools and core data in the available wells to create a complete petrophysical evaluation , introducing the lateral variation of the lithology and the different saturation distribution in the Pliocene reservoir and comparison of different saturation models to select the best one for this reservoir .

Study lateral and vertical reservoir connectivity using pressure data in the available wells as Pressure data analysis is preferred to reveal the reservoir connectivity and presence of sealing boundaries between layers ,

Use the 3D seismic data for reservoir mapping and reserve calculation using the accurate Petrophysical parameters considering all the uncertainty related to reserve calculation to optimize the further development activity.

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