شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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

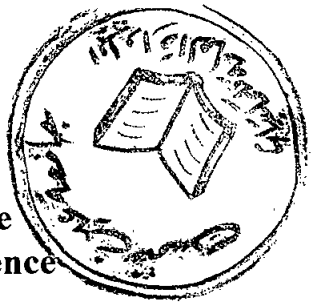
يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

بالرسالة صفحات لم ترد بالأصل

بعض الوثائق الأصلية تالفة

BIOSTRATIGRAPHY OF SOME SUBSURFACE MIOCENE ROCKS, NILE DELTA, MEDITERRANEAN-EGYPT

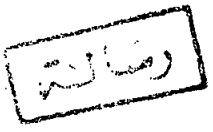


Thesis Presented in Partial Fulfillment of The Requirements For The Degree of Master of Science in Geology

BY

Abdelkader Hassan Hamed Youssif Abo-Salma

(B. Sc. in Geology, 1988)



To

Geology Department
Faculty of science
Ain Shams University

Cairo
2000

APPROVAL SHEET

BIOSTRATIGRAPHY OF SOME SUBSURFACE MIOCENE ROCKS, NILE DELTA, MEDITERRANEAN-EGYPT

Abdelkader Hassan Hamed Youssif Abo-Salma

Thesis Presented in Partial Fulfillment of The Requirements For The Degree of Master of Science in Geology

Geology Department - Faculty of Science

Ain Shams University

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Abstract

Abdelkader Hassan Hamed Yousif. **"Biostratigraphy of some subsurface Miocene rocks, Nile Delta, Mediterranean-Egypt".** *Master degree, Faculty of science, Ain Shams University, 2000.*

The present work deals with the biostratigraphy and paleobathymetry of the Miocene subsurface section of the offshore northeastern part of the Nile Delta of Egypt. Three subsurface Miocene sections have been analyzed from the wells; Horus-1, Akhen-1 and Osiris-1 east. 115 species and subspecies, beloging to 42 foraminiferal genera, were identified and discussed. Most of these species were photographed and illustrated.

Six planktonic zones and two subzones were established, these are, from top to base, as follows:

1.*Sphaeroidinellopsis* Spp Zone (Early Pliocene)
2.Non-distinctive Zone (Late Miocene)
3.*Globigerinoides obliquus extremus/ Globorotalia acostaensis* Zone (Late Miocene)
4.*Globorotalia menardii* s.l. Zone (Middle Miocene)
5.*Globorotalia siakensis* Zone (Middle Miocene)
- *Globorotalia siakensis/Globigerinoides obliquus obliquus* Subzone
- *Globigerinoides subquadrata/ Globoquadrina altispira altispira* Subzone

6.*Orbulina suturalis/Globorotalia peripheroronda* Zone (Middle Miocene)

The paleobathymetric studies on the three wells, leads to conclude that the Middle and Late Miocene periods have witnessed two major transgressive and regressive cycles, respectively.

The major Middle Miocene transgressive cycle started by a gradual increase in sea level with minor fluctuations. A minor increase in sea level continued over the eastern part while minor regressive fluctuations have prevailed in the western part of the study area.

The major Late Miocene regressive cycle followed the mentioned major trangressive cycle, began at Early Tortonian and continued to the Late Messinian and ended with the Messinian salinity crisis prevailed all over the Mediterranean region.

A Pliocene transgression followed the Messinian salinity crisis as cited through the abundance of foraminifera in the lower Pliocene rocks.

NOTE

The present thesis is submitted by ***Abdelkader Hassan Hamed Yousif Abo-Salma*** in partial fulfillment of the requirements for the degree of Master of Science in Geology.

Beside the research work materized in this thesis, the candidate has attended ten graduate courses for one year in the following topics:

- Field Geology
- Statistical Geology
- Micropaleontology
- Paleoecology
- Advanced Lithostratigraphy
- Biostratigraphy
- Sedimentary Petrology
- Sedimentation
- Advanced Structure Geology
- Geotectonics

He has successfully passed the final examination of these courses, in addition, the student has successfully passed the English Language examination.

Prof. Samir Ahmed Awad
Head of Geology Department
Ain Shams University

ACKNOWLEDGEMENT

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My appreciation is expressed to GUPCO, AMOCO and EGPC for providing the required data to achieve this work.

Thanks is due to all the Exploration staff, GUPCO, who helped in achievement of this work.

DEDICATION

This little work is dedicated to my lovely newborn son; AMR.

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