بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

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

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

MONA MAGHRABY

GEOLOGY DEPARTMENT
FACULTY OF SCIENCE

AIN SHAMS UNIVERSITY

Reservoir Evaluation Using Core-Log Data Integration: Baltim Gas Fields, Nile Delta, Egypt.

A Thesis submitted for the degree of Doctor of Philosophy in Geophysics

By

Samy Ahmed Abdo Ali Zayed

(B. Sc., Faculty of Science, Al Azhar University, 2006)

(M.Sc. in Geophysics, Faculty of Science, Al Azhar University, 2012)

To

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Approval Sheet

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Samy Zayed
2021

List of Abbreviations

FZI	Flow Zone Indicator
MICP	Mercury Injection Capillary Pressure
NMR	Nuclear Magnetic Resonance
Swi	Irreducible water saturation
XRD	*X-ray diffraction*
SEM	Scanning Electron Microscopy
TOC	Total organic carbon
Wt	Weight
RI	Resistivity Index
FF	Formation Factor
(m)	Cementation factor
(n)	Saturation exponent
CPI	Computer Processed Interpretation
RFT	Repeat Formation Tester
K	Gas Permeability
K HZT	Horizontal Permeability
K VRT	Vertical Permeability
Øeff	effective porosity
CL	Chlorite
Ka	Kaolinite
r35	pore throat radius@ 35% mercury saturation
Kr36	pore throat radius@ 36% mercury saturation
$Ø_N$	Calculated porosity from Neutron
$Ø_D$	Calculated porosity from Density
CFU	Core Flow Unit
LFU	Log Flow Unit
GD	Grain Density
API	American Petroleum Institute
PTSD	Pore Throat Size Distribution
mD	millidarcies
TTI	Time temperature index

ABSTRACT