Mona Maghraby

بسم اللّه الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم باللّه العظيم أن المادة التي تم توثيقها وتسجيلها

علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

EFFECT OF UNCERTAINTY IN ROCK AND FLUID PROPERTIES ON PRESSURE - BUILDUP WELL TEST RESULTS

By

Omalsaad Faraj Hafad Faraj

A Thesis Submitted to the
Faculty of Engineering at Cairo University
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FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Title of Thesis:

Effect of Uncertainty in Rock and Fluid Properties on Pressure-Buildup Well Test Results

Key Words:

Petrophysical analysis, Well test, Reservoir characterization, Uncertainty analysis, Pressure build up test.

Summary:

This research aims to determine the effect of uncertainty in petrophysical parameters derived from well logs analysis in potential hydrocarbon zones, on the analysis of pressure build up tests. In the present study, well log data and well test data of six wells are investigated in detail using Interactive Petrophysics (IP 3.6) software and Pan system (V 3.5) software to examine the reservoir properties and characterize the reservoir architecture. In addition, uncertainty analyses are executed on the output of the petrophysical analysis and pressure build up analysis.

DISCLAIMER

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the reference section.

Name: Omalsaad Faraj Hafad Faraj Date:

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DEDICATION

I dedicate my thesis to my husband Abdulsalam Ali, my daughter Mariam, my son Abdel Wahab and all my family.

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