

<<油气勘探工程>>

图书基本信息

书名：<<油气勘探工程>>

13位ISBN编号：9787502121709

10位ISBN编号：7502121706

出版时间：1997-09-01

出版时间：石油工业出版社

作者：丁贵明 等著

页数：210

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

内容概要

According to the 14th World Petroleum Conference , the ultimate conventional recoverable resources of oil and gas in the world are 311.3 billion tons and 32.8 billion m³ respectively. Also it is estimated by some experts that the resources can be used by human beings for 100 years or so. But all this does not indicate a optimistic exploration situation. It is showed by available data that the amount of discovered crude oil culminated between the middle fifties and the end of seventies , with an average of 5 billion tons a year , and reduced to 1.8 to 2.1 billion tons a year in the eighties and to only 1.0 billion tons at the beginning of the nineties. Meanwhile , the production surpassed the discovered reserves in the same period greatly. Since the 1980's , the major discoveries were on offshore , in which the Asia-Pacific and South America regions , whose residual recoverable reserves amount for 20% of the world ' s total amount , account for a certain proportion. The increase of reserve is mainly obtained by finding potential resources in established fields , Between 1985 and 1990 , the amount of newly found reserves , 8.9 billion tons , only amounts for 25% of total increased re-serves , 35.3 billion tons , of the world , while the other 75% of increased reserves is acquired through reevaluating the resources of former fields. All in a word the discovery of new reserves is becoming more difficult and petroleum exploration is facing a challenge.

书籍目录

PREFACE

CHAPTER 1 NEW DEVELOPMENT IN PETROLEUM GEOLOGY AND ITS RELATED SUBJECTS

1.1 Review of History of Petroleum Geology in China

1.1.2 Middle stage (from 1960s to the end of 1970s)

1.1.3 Present stage - since 1980s

1.2 Sequence Stratigraphy

1.2.1 Sequence stratigraphy fundamental and its application

1.2.2 Sequence stratigraphy of passive continental margin basin

1.2.3 Sequence stratigraphy of active continental margin basin

1.2.4 Advances in nonmarine sequence stratigraphy

1.3 Tectonic Theories on Sedimentary Basins

1.3.1 Geodynamic classification of sedimentary basins

1.3.2 Structural style concept and its significance

1.3.3 Research progresses of inversion structure and its significance

1.3.4 Tectonic transfer zones

1.3.5 Developments of principles and techniques of balance-sections

1.3.6 New knowledge of continental lithospheric structures through deep-reflection seismic prospecting

1.3.7 Wave theory of the earth crust movement

1.4 Advances in Reservoir Study

1.4.1 Reservoir sedimentation and diagenesis

1.4.2 Reservoir geochemistry

1.4.3 Reservoir heterogeneity

1.4.4 Low permeability reservoir

1.4.5 Fracture reservoir

1.5 Oil and Gas Generation Theory

1.5.1 Theory on generation of low-mature oil

1.5.2 Coal-derived hydrocarbons

1.5.4 Generation of hydrocarbons in marine carbonate rocks

1.5.5 Natural gas origin

1.6 Theory on Hydrocarbon Reservoir Formation

1.6.2 Theories about the identification of oil and gas sources

1.6.4 Oil and gas reservoir formation models

References

CHAPTER 2 NEW DEVELOPMENTS OF EXPLORATION TECHNIQUES

2.1 Review of Oil-Gas Exploration Techniques in China

2.1.1 Before China took reforming and opening to the outside policy

2.1.2 After China took reforming and opening to the outside policy

2.2 New development of data acquisition

2.2.2 The great increase of seismic resolution

2.2.3 Rapid development of 3-D seismics

2.2.4 Developing seismic processing and improving imaging accuracy

2.2.5 The development of seismic interpretation

2.2.6 The seismic exploration methods based on models

2.3 Borehole Techniques

2.3.1 Well logging

2.4 Non-Seismic Geological Survey

2.4.1 Gravity-magnetic electrical exploration

2.4.2 Oil-gas geochemical exploration

2.4.3 Hydrocarbon resource remote sensing

2.5 The Application of Computers in Oil-Gas Exploration

2.6 Petroleum Geological Modeling

2.6.1 The concept and significance of the petroleum geological model

2.6.2 Categories in petroleum geological models

2.6.3 General program and fundamental principles for modeling

2.6.4 Model and simulation

2.6.5 Modern modeling technique-computer simulation

References

CHAPTER 3 THE TASK AND PROGRAM OF PETROLEUM EXPLORATION

3.1 The Definition of Phases in Petroleum Exploration

3.1.1 The definition of exploration phases in major foreign oil producing countries

3.1.2 The definition of petroleum exploration phases in China

3.2 The Tasks, Techniques and Methods of Regional Exploration

3.2.1 The tasks of regional exploration

3.2.2 The techniques and methods applied in regional exploration

3.3 The Tasks, Techniques and Methods of Trap Preliminary Exploration

3.3.1 The tasks of trap preliminary exploration

3.3.2 The techniques and methods used in trap preliminary exploration

3.4 The Tasks, Techniques and Methods of Appraisal Exploration

3.4.1 The tasks of appraisal exploration

3.4.2 The techniques and methods used in appraisal exploration

3.5 The Trend of Petroleum Exploration Techniques-Integrated Exploration

3.5.1 The two trends in the development of petroleum exploration techniques

3.5.2 The technique integration in petroleum exploration

3.5.3 The process integration in petroleum exploration

References

CHAPTER 4 METHODS TO ANALYZE AND EVALUATE BASINS

4.1 Methods of the Early-Stage Evaluation of Basins

4.2 Methods of Basin Description

4.2.1 Researches of the strata of basins

4.2.2 Study of the basement and boundary of basins

4.2.3 Study of the structural features of basins

4.2.4 Types of basins

4.2.5 Study of the sedimentary facies in basins

4.2.6 Features of hydrocarbon-generating rocks and oil reservoirs

4.2.7 Hydrodynamic analysis of sedimentary basins

4.2.8 Geothermal and geopressure characteristics of basins

4.3 Basin Numerical Simulation (Modeling)

4.3.1 Histories of sedimentation, burial and structural development

4.3.2 Paleothermal flow and paleotemperature histories.....

CHAPTER 5 TRAP DESCRIPTION AND EVALUATION

CHAPTER 6 RESERVOIR DESCRIPTION & EVALUATION METHODS

CHAPTER 7 OIL EXPLORATION MANAGEMENT

CHAPTER 8 PETROLEUM RESOURCE MANAGEMENT

CHAPTER 9 OIL AND GAS EXPLORATION DECISION AND COMPILATION OF PROGRAMMING AND PLANNING

CHAPTER 10 EXPLOATION PROJECT MANAGEMENT AND EXPLORATION

<<油气勘探工程>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>