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Titolo	Petroleum geology of the North Sea : basic concepts and recent advances // edited by K.W. Glennie
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Edizione	[Fourth edition]
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Note generali	Revised edition of: Introduction to the petroleum geology of the North Sea. 3rd edition 1990. Includes a map of important named oil and gasfields of the North Sea area and a map of the outline of main prospective basins in the North Sea area.
Nota di bibliografia	Includes bibliographical references (pages 549-612) and index.
Nota di contenuto	Petroleum Geology of the North Sea, FOURTH EDITION; Contents; Foreword to the Fourth Edition; Foreword to the First Edition; Acknowledgements; Some Oil Industry Abbreviations and Conversion Factors; 1: Historical Review of North Sea Exploration; 1.1 Introduction; 1.2 Licensing of offshore acreage; 1.3 General factors governing the growth of new knowledge; 1.4 Main phases of North Sea exploration; 1.4.1 The period before 1959; 1.4.2 The period 1959-64; 1.4.3 The period 1964-70; 1.4.4 The period 1971-76; 1.4.5 The period 1977-85; 1.4.6 The period 1986-92; 1.4.7 The period since 1993 1.4.8 Future trends1.5 Concluding remarks; 1.6 Acknowledgements; 1.7 Key references; 1.8 Compilations and publications of North Sea conferences; 1.9 Appendix: North Sea fields: basic data; 2: Origin, Development and Evolution of Structural Styles; 2.1 Outline of the structural framework of the North Sea; 2.1.1 Introduction and rationale;

2.1.2 Sources of data; 2.1.3 Evolutionary outline; 2.1.4 Major structural features; 2.2 Pre-Devonian history; 2.2.1 Precambrian beginnings; 2.2.2 The Caledonian plate cycle; 2.3 Post-Caledonian structure and basin development; 2.3.1 The Variscan plate cycle 2.3.2 Post-Variscan basin development: the North Sea in an intraplate setting 2.4 Conclusions; 2.5 Acknowledgements; 2.6 Key references; 2.7 Appendix: seismic cross-section; 3: Devonian; 3.1 Introduction; 3.2 Regional setting; 3.2.1 Tectonostratigraphic summary; 3.3 Orcadian Basin; 3.3.1 Basin overview; 3.3.2 Stratigraphic summary; 3.3.3 Reservoir potential; 3.3.4 Source-rock quality; 3.3.5 Thermal history and hydrocarbon generation; 3.3.6 Summary of hydrocarbon plays; 3.4 The Central North Sea; 3.4.1 Basin overview; 3.4.2 Stratigraphic summary; 3.4.3 Reservoir potential 3.4.4 Potential source rocks 3.4.5 Summary of hydrocarbon plays; 3.5 Other areas; 3.5.1 Midland Valley of Scotland and Forth Approaches Basin; 3.5.2 Northumberland Trough/Scottish Border Basin; 3.5.3 Southern North Sea; 3.5.4 Southern Britain/Welsh Borders; 3.5.5 West of Shetland; 3.6 Acknowledgements; 3.7 Key references; 4: Carboniferous; 4.1 Introduction; 4.1.1 General background; 4.1.2 Historical development; 4.1.3 Nature of previous geological study; 4.1.4 Stratigraphic methodology; 4.1.5 Stratigraphic nomenclature; 4.2 Overview; 4.2.1 Tectonic setting; 4.2.2 Palaeoclimate 4.2.3 Sedimentary cyclicity and sequence stratigraphy 4.3 Regional palaeogeographical development; 4.3.1 Tournaisian; 4.3.2 Viséan; 4.3.3 Namurian; 4.3.4 Early-mid-Westphalian; 4.3.5 Mid-late Westphalian and Stephanian; 4.4 Carboniferous geology of the North Sea: introduction; 4.5 Moray Firth and Forth Approaches areas; 4.5.1 Stratigraphy and facies; 4.5.2 Petroleum geology; 4.6 Mid North Sea High and south Central Graben; 4.6.1 Stratigraphy and facies; 4.6.2 Petroleum geology; 4.7 Southern North Sea; 4.7.1 Tectonic framework; 4.7.2 Carboniferous subcrop pattern 4.7.3 Lithostratigraphy and facies

Sommario/riassunto

Since the 3rd edition of this publication, emphasis within the petroleum industry has shifted from exploration to appraisal and development of existing hydrocarbon resources. This change is reflected in this new 4th edition, which has been significantly expanded to accommodate additional material. The centrepiece of the book, however, remains a series of descriptions, in stratigraphic order, of the depositional history and hydrocarbon related rock units of the North Sea.
