

Contents

	Page
Preface	vii
Introduction: BROOKS, J.	ix
GEOLOGICAL AND GEOCHEMICAL STUDIES ON NW EUROPE CONTINENTAL SHELF	
WALMSLEY, P. J. The Role of the Department of Energy in Petroleum Exploration of the United Kingdom	3
MAKOURINE, A. Gas Exploration and Reserves in Europe	11
BARNARD, P. & COOPER, B. S. A Review of Geochemical Data Related to the Northwest European Gas Province	19
GERVIRTZ, J. L., CAREY, B. D. Jr. & BLANCO, S. R. Surface Geochemical Exploration in the North Sea	35
FABER, E. & STAHL, W. J. Analytical Procedure and Results of an Isotope Geochemical Surface Survey in an Area of the British North Sea	51
SIGALOVE, J. Petroleum Offshore Sniffer Exploration*	65
CANDY, G. J. Petroleum Exploration Onshore U.K.†	67
BRENNAND, T. P. North Sea Petroleum Exploration*	69
RØNNEVIK, H., EGGEN, S. & VOLLSET, J. Exploration of the Norwegian Shelf	71
MUDGE, D. C. & BLISS, G. M. Stratigraphy and Sedimentation of the Palaeocene Sands in the North Sea	95
CURTIS, C. D. Geochemistry of Porosity Enhancement and Reduction in Clastic Sediments	113
IRWIN, H. & HURST, A. Applications of Geochemistry to Sandstone Reservoir Studies	127
PEARSON, M. J. & WATKINS, D. Organofacies and Early Maturation Effects in Upper Jurassic Sediments from the Inner Moray Firth Basin, North Sea	147
PEARSON, M. J., WATKINS, D., PITTION, J.-L., CASTON, D. & SMALL, J. S. Aspects of Burial Diagenesis, Organic Maturation and Palaeothermal History of an Area in the South Viking Graben, North Sea	161
CORNFORD, C., MORROW, J. A., TURRINGTON, A., MILES, J. A. & BROOKS, J. Some Geological Controls on Oil Composition in the U.K. North Sea	175
FISHER, M. J. & MILES, JENNIFER, A. Kerogen Types, Organic Maturation and Hydrocarbon Occurrences in the Moray Firth and South Viking Graben, North Sea Basin	195
REITSEMA, R. H. Geochemistry of the North and South Brae Areas, North Sea	203
GRIFFITH, A. E. The Search for Petroleum in Northern Ireland	213
ROBERTS, D. G. Frontier Exploration in Western and Northwest Europe†	223
PETROLEUM EXPLORATION OF EUROPE	
MATTAPELLI, L., RICCHIUTIO, T., GRIGHANI, D. & SCHOELL, M. Origins of Natural Gas in the Po Valley, N. Italy*	227
WHITICAR, M. & SCHOELL, M. Isotope Geochemistry of Natural Gases in Central Europe* ..	229
KUCKELKORN, K., WEHNER, H. & HUFNAGEL, H. Geochemical Observations of Oil Generation in the German Alps and their Foreland	231

PETROLEUM GEOCHEMICAL PRINCIPLES AND TECHNIQUES

WELTE, D. H., YUKLER, M. A., RADKE, M., LEYTHAEUSER, D., MANN, U. & RITTER, U. Organic Geochemistry and Basin Modelling—Important Tools in Petroleum Exploration	237
McKENZIE, D. P. Basin Evolution and Hydrocarbon Generation†	253
DURAND, B. & PARATTE, M. Oil Potential of Coals—A Geochemical Approach	255
SCHENK, P. A., de LEEUW, J. W., VIETS, T. C. & HAVERKAMP, J. Pyrolysis – Mass Spectrometry in Coal Chemistry: a study of the coalification of vitrinites and the typiciation of Australian Brown Coals	267
BATTEN, D. J. Identification of Amorphous Sedimentary Organic Matter by Transmitted Light Microscopy	275
SMITH, P. M. R. Spectral Correlation of Spore Coloration Standards	289
BUI SKOOL TOXOPEUS, J. M. A. Selection Criteria for the Use of Vitrinite Reflectance as a Maturity Tool	295
BARWISE, A. J. G. Use of Porphyrins as a Maturity Parameter for Oils and Sediments	309

GEOLOGICAL INFORMATION ON HYDROCARBON EXPLORATION ON THE U.K. CONTINENTAL SHELF

Introduction: BAXTER, G. G.	319
McKAY, D. J. The Compilation of an Earth Science Bibliography for the North Sea and Adjacent Areas	321
WIGLEY, P. Commercially Available Geological Databanks—U.K.C.S.	329
BROOKS, J. R. V. Geological Information from Hydrocarbon Exploration on the United Kingdom Continental Shelf	343
CHEW, K. J. & STEPHENSON, H. EXPHST—A Program to Analyse the History of Exploration Success within a Basin or Country	357
BAXTER, G. G. The Use of Computerised Information in Britoil, Exploration Division*	373
Subject Index	375

* indicates an abstract only

† indicates an extended abstract