Contents

CROKER, P. F. & SHANNON, P. M. The petroleum geology of Ireland's offshore basins: introduction 1

READMAN, P. W., O'REILLY, B. M., EDWARDS, J. W. F. & SANKEY, M. J. A gravity map of Ireland and surrounding waters 9

SHELTON, R. Mesozoic basin evolution of the North Channel: preliminary results 17

FITZSIMONS, S. & PARNELL, J. Diagenetic history and reservoir potential of Permo-Triassic sandstones in the Rathlin Basin 21


TRUEBLOOD, S., BRYAN, C. & PICKERING, S. The Douglas oil field and its implications for exploration on the Irish Continental Shelf 39

CROKER, P. F. Shallow gas accumulation and migration in the western Irish Sea 41

MADDOX, S. J., BLOW, R. & HARDMAN, M. Hydrocarbon prospectivity of the Central Irish Sea Basin with reference to Block 42/12, offshore Ireland 59

GRIFFITHS, P. S. Predictive model for the development and distribution of Triassic reservoir sands offshore southeast Ireland based on seismic sequence geometries at the Variscan unconformity 79

MUSGROVE, F. W., MURDOCH, L. M. & LENEHAN, T. The Variscan fold-thrust belt southeast of Ireland and its control on early Mesozoic extension and deposition: a method to predict the Sherwood Sandstone 81

ROWELL, P. Tectono-stratigraphy of the North Celtic Sea Basin 101

EWINS, N. P. & SHANNON, P. M. Sedimentology and diagenesis of the Jurassic and Cretaceous of the North Celtic Sea and Fastnet Basins 139

KESSLER, L. G. & SACHS, S. D. Depositional setting and sequence stratigraphic implications of the Upper Sinemurian (Lower Jurassic) sandstone interval, North Celtic Sea/St George's Channel Basins, offshore Ireland 171


CASTON, V. N. D. The Helvick oil accumulation, Block 49/9, North Celtic Sea Basin 209


HARTLEY, A. Sedimentology of the Cretaceous Greensand, Quadrants 48 and 49, North Celtic Sea Basin: a progradational shoreface deposit 245

MURRAY, M. V. Development of small gas fields in the Kinsale Head area 259

HOWELL, T. J. & GRIFFITHS, P. A study of the hydrocarbon distribution and Lower Cretaceous Greensand prospectivity in Blocks 48/15, 48/17, 48/18 and 48/19, North Celtic Sea Basin 261

CRAVEN, J. E. The tectonic evolution, stratigraphy and petroleum potential of the Mizen Basin, southwest Celtic Sea 277

SMITH, C. Evolution of the Cockburn Basin: implications for the structural development of the Celtic Sea basins 279

MURDOCH, L. M., MUSGROVE, F. W. & PERRY, J. S. Tertiary uplift and inversion history in the North Celtic Sea Basin and its influence on source rock maturity 297
MENPES, R. J. & HILLIS, R. R. Quantification of Tertiary exhumation from sonic velocity data, Celtic Sea/Southwestern Approaches

MCMAHON, N. A. & UNDERHILL, J. R. The regional stratigraphy of the southwest United Kingdom and adjacent offshore areas with particular reference to the major intra-Cretaceous unconformity

CROKER, P. F. The Clare Basin: a geological and geophysical outline

O'DRISCOLL, D., HOLCOMBE, B. B., ROSE, P. T. & JONES, D. J. Cretaceous and Tertiary unconformities in the Atlantic margin basins

EARLS, T. C. Potential for development of the Connemara Field, Block 26/28


MCCANN, T., SHANNON, P. M. & MOORE, J. G. Fault styles in the Porcupine Basin, offshore Ireland: tectonic and sedimentary controls

SCOTCHMAN, I. C. & THOMAS, J. R. W. Maturity and hydrocarbon generation in the Slyne Trough, northwest Ireland

O'REILLY, B. M., HAUSER, F., JACOB, A. W. B., SHANNON, P. M., MAKRIS, J. & VOGT, U. The Erris and eastern Rockall Troughs: structural and sedimentological development

ENGLAND, R. W. Westline: a deep near-normal incidence reflection profile across the Rockall Trough

JACOB, A. W. B., SHANNON, P. M., MAKRIS, J., HAUSER, F., VOGT, U. & O'REILLY, B. M. An overview of the results of the RAPIDS seismic project, North Atlantic

Daly, J. S., HEAMAN, L. M., FITZGERALD, R. C., MENUGE, J. F., BREWER, T. S. & MORTON, A. C. Age and crustal evolution of crystalline basement in western Ireland and Rockall

SHANNON, P. M., JACOB, A. W. B., MAKRIS, J., O'REILLY, B., HAUSER, F. & VOGT, U. Basin development and petroleum prospectivity of the Rockall and Hatton region

MAKRIS, J., LANGE, K., SAVOSTIN, L. & SEDOV, V. A wide-angle reflection profile across the Iceland-Faeroe Ridge

SHANNON, P. M., WILLIAMS, B. P. J. & SINCLAIR, I. K.: Tectonic controls on Upper Jurassic to Lower Cretaceous reservoir architecture in the Jeanne d'Arc Basin, with some comparisons from the Porcupine and Moray Firth Basins

Appendix. A list of common abbreviations

Index