

Contents

JOLLEY, S. J., FISHER, Q. J. & AINSWORTH, R. B. Reservoir compartmentalization: an introduction	1
FOX, R. J. & BOWMAN, M. B. J. The challenges and impact of compartmentalization in reservoir appraisal and development	9
SMALLEY, P. C. & MUGGERIDGE, A. H. Reservoir compartmentalization: get it before it gets you	25
PÁEZ, R. H., LAWERENCE, J. J. & ZHANG, M. Compartmentalization or gravity segregation? Understanding and predicting characteristics of near-critical petroleum fluids	43
CHUPAROVA, E., KRATOCHVIL, T., KLEINGELD, J., BILINSKI, P., GUILLORY, C., BIKUN, J. & DJOJOSOEPARTO, R. Integration of time-lapse geochemistry with well logging and seismic to monitor dynamic reservoir fluid communication: Auger field case-study, deep water Gulf of Mexico	55
GILL, C. E., SHEPHERD, M. & MILLINGTON, J. J. Compartmentalization of the Nelson field, Central North Sea: evidence from produced water chemistry analysis	71
GAINSKI, M., MACGREGOR, A. G., FREEMAN, P. J. & NIEUWLAND, H. F. Turbidite reservoir compartmentalization and well targeting with 4D seismic and production data: Schiehallion Field, UK	89
TOZER, R. S. J. & BORTHWICK, A. M. Variation in fluid contacts in the Azeri field, Azerbaijan: sealing faults or hydrodynamic aquifer?	103
SCOTT, E. D., GELIN, F., JOLLEY, S. J., LEENAARTS, E., SADLER, S. P. & ELSINGER, R. J. Sedimentological control of fluid flow in deep marine turbidite reservoirs: Pierce Field, UK Central North Sea	113
WONHAM, J. P., CYROT, M., NGUYEN, T., LOUHOUMOU, J. & RUAU, O. Integrated approach to geomodelling and dynamic simulation in a complex mixed siliciclastic–carbonate reservoir, N’Kossa field, Offshore Congo	133
McKIE, T., JOLLEY, S. J. & KRISTENSEN, M. B. Stratigraphic and structural compartmentalization of dryland fluvial reservoirs: Triassic Heron Cluster, Central North Sea	165
AINSWORTH, R. B. Prediction of stratigraphic compartmentalization in marginal marine reservoirs	199
HOVADIK, J. M. & LARUE, D. K. Stratigraphic and structural connectivity	219
YIELDING, G., BRETAN, P. & FREEMAN, B. Fault seal calibration: a brief review	243
FREEMAN, S. R., HARRIS, S. D. & KNIPE, R. J. Cross-fault sealing, baffling and fluid flow in 3D geological models: tools for analysis, visualization and interpretation	257
IRVING, A. D., CHAVANNE, E., FAURE, V., BUFFET, P. & BARBER, E. An uncertainty modelling workflow for structurally compartmentalized reservoirs	283
VAN HULTEN, F. F. N. Geological factors effecting compartmentalization of Rotliegend gas fields in the Netherlands	301

CORONA, F. V., DAVIS, J. S., HIPPLER, S. J. & VROLIJK, P. J. Multi-fault analysis scorecard: testing the stochastic approach in fault seal prediction	317
RICHARDS, F. W., VROLIJK, P. J., GORDON, J. D. & MILLER, B. R. Reservoir connectivity analysis of a complex combination trap: Terra Nova Field, Jeanne d'Arc Basin, Newfoundland, Canada	333
Index	357