

Contents

SPENCE, G. H., COUPLES, G. D., BEVAN, T. G., AGUILERA, R., COSGROVE, J. W., DANIEL, J.-M. & REDFERN, J. Advances in the study of naturally fractured hydrocarbon reservoirs: a broad integrated interdisciplinary applied topic	1
Investigating fracture networks using outcrop, core and geophysical data	
SONNTAG, R., EVANS, J. P., LA POINTE, P., DERAPS, M., SISLEY, H. & RICHEY, D. Sedimentological controls on the fracture distribution and network development in Mesaverde Group sandstone lithofacies, Uinta Basin, Utah, USA	23
SEERS, T. D. & HODGETTS, D. Comparison of digital outcrop and conventional data collection approaches for the characterization of naturally fractured reservoir analogues	51
ROTEVATN, A. & BASTESSEN, E. Fault linkage and damage zone architecture in tight carbonate rocks in the Suez Rift (Egypt): implications for permeability structure along segmented normal faults	79
SAGI, D. A., ARNHILD, M. & KARLO, J. F. Quantifying fracture density and connectivity of fractured chalk reservoirs from core samples: implications for fluid flow	97
HENCHER, S. R. Characterizing discontinuities in naturally fractured outcrop analogues and rock core: the need to consider fracture development over geological time	113
Numerical and statistical simulations and models	
GEIGER, S. & MATTHÄI, S. What can we learn from high-resolution numerical simulations of single- and multi-phase fluid flow in fractured outcrop analogues?	125
COUPLES, G. D. Geomechanical impacts on flow in fractured reservoirs	145
HEFFER, K. J. Geomechanical mechanisms involving faults and fractures for observed correlations between fluctuations in flowrates at wells in North Sea oilfields	173
ZHOU, X., KARIMI-FARD, M., DURLOFSKY, L. J. & AYDIN, A. Fluid flow through porous sandstone with overprinting and intersecting geological structures of various types	187
SPENCE, G. H. & FINCH, E. Influences of nodular chert rhythmites on natural fracture networks in carbonates: an outcrop and two-dimensional discrete element modelling study	211
GUDMUNDSSON, A. & LØTVEIT, I. F. Sills as fractured hydrocarbon reservoirs: examples and models	251
DELORME, M., OLIVEIRA MOTA, R., KHVONKOVA, N., FOURNO, A. & NETINGER, B. A methodology to characterize fractured reservoirs constrained by statistical geological analysis and production: a real field case study	273
Case studies	
MURRAY, A. & MONTGOMERY, D. W. Characterization of highly fractured basement, Say'un Masila Basin, Yemen	289
SLIGHTAM, C. Characterizing seismic-scale faults pre- and post-drilling; Lewisian Basement, West of Shetlands, UK	311

BOSWORTH, W., KHALIL, S., CLARE, A., COMISKY, J., ABDELAL, H., REED, T. & KOKKOROS, G. Integration of outcrop and subsurface data during the development of a naturally fractured Eocene carbonate reservoir at the East Ras Budran concession, Gulf of Suez, Egypt	333
WARD, M. V., PEARSE, C., JEHANNO, Y., O'HANLON, M., ZETT, A. & HOULISTON, D. The Machar Oil Field, UK Central North Sea: impact of seismic reprocessing on the development of a complex fractured chalk field	361
SAOUDI, A., MOUSTAFA, A. R., FARAG, R. I., OMARA, M. M., WALLY, H., FOUAD, A., TAG, A. & RAGAB, R. Z. Dual-porosity fractured Miocene syn-rift dolomite reservoir in the Issaran Field (Gulf of Suez, Egypt): a case history of the zonal isolation of highly fractured water carrier bed	379
OGATA, K., SENGER, K., BRAATHEN, A., TVERANGER, J. & OLAUSSEN, S. The importance of natural fractures in a tight reservoir for potential CO ₂ storage: a case study of the upper Triassic–middle Jurassic Kapp Toscana Group (Spitsbergen, Arctic Norway)	395
Index	417