

GEOLOGICAL SOCIETY SPECIAL PUBLICATION NO 77

Coal and Coal-bearing Strata as Oil-prone Source Rocks?

EDITED BY

ANDREW C. SCOTT

Geology Department,
Royal Holloway University of London

AND

ANDREW J. FLEET

BP Exploration,
Sunbury-on-Thames

1994

Published by

The Geological Society

London

Contents

FLEET, A. J. & SCOTT, A. C. Coal and coal-bearing strata as oil-prone source rocks: an overview	1
General studies	
POWELL, T. G. & BOREHAM, C. J. Terrestrially sourced oils: where do they exist and what are our limits of knowledge?	11
COLLINSON, M. E., VAN BERGEN, P. F., SCOTT, A. C. & DE LEEUW, J. W. The oil-generating potential of plants from coal and coal-bearing strata through time: a review with new evidence from Carboniferous plants	31
PHILP, P. R. Geochemical characteristics of oils derived predominantly from terrigenous source materials	71
STOUT, S. A. Chemical heterogeneity among adjacent coal microlithotypes – implications for oil generation and primary migration from humic coal	93
MACGREGOR, D. S. Coal-bearing strata as source rocks – a global overview	107
Case histories	
THOMPSON, S., COOPER, B. S. & BARNARD, P. C. Some examples and possible explanations for oil generation from coals and coaly sequences	119
MATCHETTE-DOWNES, C. J., FALICK, A. E., KARMAJAYA, & ROWLAND, S. A maturity and palaeoenvironmental assessment of condensates and oils from the North Sumatra Basin, Indonesia	139
CURRY, D. J., EMMETT, J. K. & HUNT, J. W. Geochemistry of aliphatic-rich coals in the Cooper Basin, Australia, and Taranaki Basin, New Zealand: implications for the occurrence of potentially oil-generative coals	149
BAGGE, M. A. & KEELY, M. L. The oil potential of Mid-Jurassic coals in northern Egypt	183
SCOTT, A. C. & FLEET, A. J. Coal and coal-bearing strata as oil-prone source rocks: current problems and future directions	201
Index	207