OIL SOURCE BED HYDROCARBON ANALYSIS - SOME METHODS AND INTERPRETATIONS

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A well section, designated "Wildcat-1", has been evaluated by a suite of geochemical techniques including pyrolysis and gas chromatography. The operating principles of pyrolysis and gas chromatography are briefly discussed, and the basic interpretations that may be obtained from these data are presented. The results of the analyses indicate that the 1000 to 1800 metres interval of the well section has little or no hydrocarbon generating potential at any level of thermal maturity. However the 1800 to 3000 metres interval is a fair source rock generating moderate quantities of oil between about 2200 to 2900 metres. Pyrolysis alone was sufficient to screen out the poor source rocks between 1000 and 1800 metres, but insufficient to unequivocally delineate the oil generation in the 1900 to 3000 metres interval. However without pyrolysis neither the quantity of oil generation from this interval between 2200 to 2900 metres, nor its unrealised potential between 1800 and 2200 metres could have been estimated.
