Gas Generation Assessment using Geochemical Data – Example from the Barnet Gas Shale Basin

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Basin assessment of oil and gas potential was normally appraised on volume of sedimentary rock, available reservoir quality and, comparison with known, oil, and/or gas productive basins. Geochemical data plays a major role in providing the exploration geologist with thermal maturity history, organic matter richness and organic matter type, and information as to the gas and/or oil prospectivity of the individual stratigraphic formations.

Geochemical data, routinely available can be quantified to address the questions of, how much oil and gas has actually been generated, what are the maximum and minimum amounts possible, what is the remaining gas generating potential and how much gas, and oil, has migrated? The only unknown, remains how much has accumulated? Gas generation models will be discussed for the Barnet Shale Gas play in the Fort Worth Basin.