PETROGRAPHIC IMAGE ANALYSIS, PORE CLASSIFICATION AND THE STUDY OF RESERVOIR PORE COMPLEX

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Petrographic Image Analysis or "PIA" technique together with the multivariate vector analyses of Extended Cabfac and Q-models may be used in the classification of reservoir pore complex. Such a technique would yield a good number of quantitative variables which can be statistically correlated with conventional petrophysical reservoir parameters such as measured porosity and permeability. Linear Regression Model of measured permeability for example, set against percent pore type optical porosity derived from the PIA technique provides useful insight into the nature of pore interplay reflecting inherent petrographical variations in the reservoir rock.