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Porosity; Primary Porosity; Secondary Porosity; Visual Description of Porosity in Carbonate Rocks; Fluid Saturation; Quantitative Use of Porosity; Permeability; Classification of Permeability; Factors Affecting the Magnitude of Permeability; Permeability-Porosity Relationships; Kozeny Correlation; Concept of Flow Units; Mathematical Theory of Flow Units; Specific Surface Area; Flow Unit Characterization Factors; Flow Units Functions; Reservoir Zonation Using Normalized RQI; Effect of Packing on Permeability

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Averaging TechniquesEffective Permeability from Core Data; Average Porosity and Saturation; Permeability from Well Test Data; Statistical Zonation Technique; Problems; 4. Formation Resistivity and Water Saturation; Formation Resistivity Factor; Resistivity Measurement; Determination of Formation Water Resistivity; Chemical Analysis; Resistivity-Concentration Equations; Spontaneous Potential Curve; Shale-Properties Method; Correlation Between $F_{(R)}$ and Porosity; Correlations Between $F_{(R)}$ and Tortuosity; Correlations Between $F_{(R)}$ and Cementation; Theoretical Formula for $F_{(R)}$ Correlation Between $F_{(R)}$ and Water Saturation

Sommario/riassunto	This new edition includes updated case studies, examples and experiments as well as a new chapter on modeling and simulations. It also includes recent advances in wireline logging interpretation methods, effective media models, inversion of resistivity log measurements, dipole acoustic shear and Stoneley wave techniques, Biot-Gassmann models and MRI. Comprehensive but easy to useNew case studies, exercises and worked examplesA 30% update over the second editionTechniques for conducting competent quick-look evaluationsOnline component w