



**The Society of  
Petrophysicists and  
Well Log Analysts**

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**PETROPHYSICS**  
THE SPWLA JOURNAL OF FORMATION EVALUATION RESERVOIR DESCRIPTION

Sample Section of One  
Realization of a Micromodel

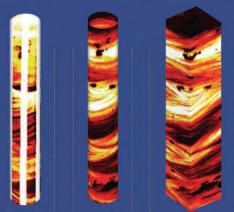


IMAGE LOG

RESISTIVITY SECTION

PERMEABILITY

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**About the Cover**

On the cover: From the paper by Manchuk et al., a 3D view of a high-resolution formation microresistivity image log covering a 1.3-m interval of the McMurray formation in Alberta. The image log on the left is shaded arbitrarily by resistivity, where higher values are associated with higher porosity and oil saturation. Resistivity is used in conjunction with facies logs and diameter data to construct high-resolution models of permeability, as shown on the right, that can be used to obtain permeability logs through the use of flow-based upscaling. Although only a short interval is shown, the models can extend over the full thickness of a formation.

# PETROPHYSICS

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The Society of Petrophysicists and Well Log Analysts is dedicated to the advancement of the science of formation evaluation through well logging and other formation evaluation techniques. SPWLA is dedicated to the application of these techniques, to the exploration and exploitation of gas, oil and other minerals. PETROPHYSICS publishes original contributions on theoretical and applied aspects of formation evaluation; particularly well logging and petrophysics.

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