

Shale gas reservoir characterization workflows Atlantic Margins

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Abstract

As shale gas resources have emerged as a viable energy source, their characterization has gained significance. The organic content in these shales which are measured by their TOC ratings, influence the compressional and shear velocities as well as the density and anisotropy in these formations. Consequently, it should be possible to detect changes in TOC from the surface seismic response. Besides TOC, different shale formations have different properties in terms of maturation, gas-in-place, permeability, and brittleness. We discuss different workflows for characterizing shale formations that involve well log data as well as seismic data.