Seismic Data Preconditioning for Improved Reservoir Characterization (Inversion and Fracture Analysis)

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Abstract

Advanced seismic techniques such as prestack inversion or azimuthal analysis are now routinely adopted for quantitative reservoir characterization of rock properties and fracture indicators, however the quality of the input seismic data is critical to such advanced analyses. Frequency content, random and coherent noise, amplitude-preserving processing and gather flatness must be addressed at the preconditioning stage. Improved results and increased confidence follow from careful well-driven modeling and QCs.

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