

METHOD FOR DETERMINING FORMATION QUALITY FACTOR FROM DUAL-SENSOR MARINE SEISMIC SIGNALS

Abstract

[0039] A method for estimating formation quality factor includes determining an upgoing pressure wavefield of seismic signals recorded using a collocated pressure responsive sensor and motion responsive sensor deployed in a body of water. The upgoing wavefield has spectral effect of water surface ghosting attenuated by combining the pressure responsive signals and motion responsive signals. The quality factor is determined by determining a difference in amplitude spectra between a first seismic event and a second seismic event in the upgoing pressure wavefield.

FIG. 2