Weatherford's flawed testing procedure

Best Practices	Macondo Practices	Effect on Reliability of Weatherford Data
2-to-1 length-to-diameter (L/D) ratio	1.2-to-1 L/D ratio	Underpredicts compressibility
Whole core; test direction mimics field conditions	Rotary sidewall core; tested in wrong direction	Underpredicts compressibility
Simulate in-situ reservoir conditions of temperature and saturation	Tests at room temperature; UPVC samples kerosene- saturated; hydrostatic and triaxial tests on dry cores	Underpredicts compressibility
Buildup rate of 1 psi/sec and depletion loading rate of .1 psi/sec; measure for creep and seating loads	Buildup rate of 4.2 psi/sec and depletion rate of .5 psi/sec; no measurement for creep or seating loads	Underpredicts compressibility
Tests on undamaged cores	Cores subjected to drilling mud and high stress	Increases uncertainty
Calibrate equipment before and after tests	Unknown	Increases uncertainty