

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	<i>Underpredicts compressibility</i>
Whole core; test direction mimics field conditions	Rotary sidewall core; tested in wrong direction	<i>Underpredicts compressibility</i>
Simulate in-situ reservoir conditions of temperature and saturation	Tests at room temperature; UPVC samples kerosene-saturated; hydrostatic and triaxial tests on dry cores	<i>Underpredicts compressibility</i>
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	<i>Underpredicts compressibility</i>
Tests on undamaged cores	Cores subjected to drilling mud and high stress	<i>Increases uncertainty</i>
Calibrate equipment before and after tests	Unknown	<i>Increases uncertainty</i>