

## 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>              |