

## The Anatomy of Pressure Testing a Well (courtesy of Wall Street Journal)

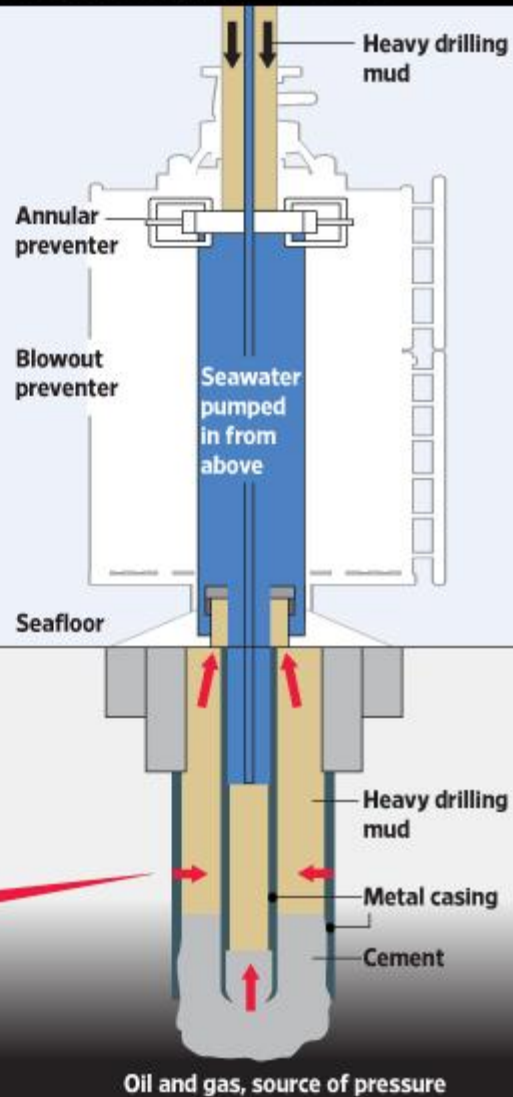
### Pressure Testing | A key way to determine the integrity of a well

While drilling the well, engineers force heavy drilling mud down to keep oil and gas from gushing upward. After drilling, operators use a negative pressure test to see if any oil or gas leaks into the well:

1. Some of the heavy drilling fluid in the well to hold down the pressure of the reservoir is replaced with lighter seawater.
2. The annular preventer, part of the blowout preventer, is closed, removing more weight on the well from the drilling mud above.
3. With seawater in place, rig workers monitor well pressure for 30 minutes.

4. If there is a rise in pressure, steps can be taken to bring the well back under control. If pressure is constant, then the well has passed the test.

5. If there are leaks, oil and gas will slowly flow into the well. This occurred on Deepwater Horizon, though it is unclear where it leaked.



Note: Diagram is schematic and not to scale

Sources: Halliburton; testimony from BP and Transocean workers