

**Regulatory Citation(s):**

**78.84. Casing standards.**

(c) Used casing may be approved for use as surface, intermediate, or production casing but shall be pressure tested after cementing and before continuation of drilling. A passing pressure test is holding the anticipated maximum pressure to which it will be exposed for 30 minutes with not more than a 10% decrease in pressure.

(d) New or used plain end casing, except when being used as conductor pipe that is welded together for use must meet the following requirements:

- (1) The casing must pass a pressure test by holding the anticipated maximum pressure to which the casing will be exposed for 30 minutes with not more than 10% decrease in pressure. The operator shall notify the Department at least 24 hours before conducting the test. The test results shall be entered on the drilling log.

**Question:**

Is pressure testing for used or welded surface casing necessary when surface casing will be used as production casing and no gas pressure is anticipated?

**Response:**

The intent of the above regulatory citations is to prevent produced fluids (i.e., gas and brines) from entering the surrounding formation through casing breaches, which are more likely to occur in used and welded casing sections. In a scenario where no gas-bearing formations will be encountered over the open-hole interval of the well, casing integrity problems will result in the infiltration of fresh groundwater into the surface casing rather than the escape of gas beyond the footprint of the well. Although this poses a problem with regard to efficient operation of the well, it does not result in significant environmental risks and, therefore, the maximum anticipated pressure in this case is considered 0 psi and pressure testing is not required. At their discretion, an operator may wish to pressure test the casing to a pressure equivalent to the hydrostatic pressure at the surface casing seat to ensure that welded joints and used casing sections will prevent fresh groundwater from entering the wellbore and affecting operations.