

WAC 344-12-087

Well casing—Cementing.

(1) The owner shall case and cement all wells with a sufficient number of strings of casing in a manner necessary to:

(a) Prevent release of fluids from any stratum through the wellbore (directly or indirectly) into any waters of the state;

(b) Prevent commingling between separate hydrocarbon-bearing strata and intermingling between hydrocarbon and underground sources of drinking water, and between separate water-bearing strata;

(c) Prevent contamination of potential fresh water strata, gas, or oil zones;

(d) Support unconsolidated sediments; and

(e) Otherwise provide a means of control of the formation pressures and fluids.

The owner shall install casing of sufficient strength and size to provide optimum well control while drilling and to assure safe operations for the life of the well.

(2) Conductor casing. Conductor casing shall be set before drilling into shallow formations known to contain oil or gas, if unknown, upon encountering such formation.

(3) Surface casing. Surface casing holes shall be logged with an induction electric log, or equivalent, prior to running surface casing.

(4) Cementing of casing. Conductor and surface casing strings shall be cemented with sufficient cement to fill the annular space from the shoe to surface. Production casing shall be cemented in a manner necessary to exclude, isolate, or segregate overlying formation fluids from the oil or gas zone and to prevent the movement of fluids into potential underground source of drinking water.

A temperature or cement bond log may be required by the supervisor if an unsatisfactory cementing job is indicated.

(5) Pressure testing. Prior to drilling out the casing shoe after cementing, all casing strings set to a depth of 500 feet (152 meters) or less except for conductor casing, shall be pressure tested to a minimum pressure of 500 psi (35 bars). Casing strings set to a depth of 500 feet (152 meters) or greater shall be pressure tested to a minimum pressure of 1,000 psi (69 bars) or 0.2 psi/ft (0.045 bars/meter) whichever is greater. Such test shall not exceed the rated working pressure of the casing or the blowout preventer stack assembly, whichever is less.

Unless otherwise provided by specific order of the supervisor for a particular well or wells or for a particular pool or parts thereof, cemented casing string shall stand under pressure until the cement has reached a compressive strength of 300 pounds per square inch (21 bars): Provided, however, That no further operation shall be commenced until the cement has been in place for at least eight hours. The term "under pressure" as used herein shall be complied with if one float valve is used or if pressure is otherwise held.

All casing pressure tests shall be recorded in the driller's log.

[Statutory Authority: RCW [78.52.050](#). WSR 85-03-018 (Order 6, Resolution No. 10), § 344-12-087, filed 1/8/85. Statutory Authority: RCW [78.52.050](#) and chapter [78.52](#) RCW. WSR 82-12-052 (Order 3, Resolution No. 7), § 344-12-087, filed 6/1/82. Formerly WAC 344-12-085.]