Regulatory Citation(s):

78.89. Gas migration response.

(e) The Department may require the operator to take the following additional actions:

(3) Conduct an immediate evaluation of the operator's adjacent oil or gas wells to determine well cement and casing integrity and to evaluate the potential mechanism of migration. This evaluation may include assessing pressures for all casing intervals, reviewing records for indications of defective casing or cement, application of **cement bond logs**, ultrasonic imaging tools, geophysical logs, and other mechanical integrity tests as required. The initial area of assessment must include wells within a radius of 2,500 feet and may be expanded if required by the Department.

Question:

How long does an operator have to wait before running a CBL? Can they start drilling in 8 hours and complete the log prior to setting the next string of casing?

Response:

Running a CBL is not a required component of casing installation and cementing, but may be useful in certain situations including scenarios where surface returns are recommended or expected but not achieved. It is only referenced one time in Chapter 78 in the context of stray gas migration investigations under Section 78.89. The excerpted citation from Chapter 78 that mentions CBL can be found above.

The United States EPA states that cement should be allowed to develop full compressive strength prior to running CBL. They suggest 72 hours as a conservative rule-of-thumb. Running such a log prior to allowing the cement to achieve full compressive strength may show poor bonding (Ground Water Section Guidance No. 34).

One risk of drilling out casing and extending the wellbore prior to running a cement bond log is that if cement integrity is compromised, extending the wellbore may expose defective cement to natural open flow pressures and other formational fluids.