OPERATOR GUIDANCE FOR RULE 317.p 9/30/2014

Rule 317.p requires wells to be logged with a minimum of open-hole resistivity and gamma ray logs. In order to ensure compliance, every APD will address Rule 317.p with either an operator-proposed BMP or a COA placed by COGCC. The acceptable BMP/COA language is:

Open-hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well-bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open-hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.

However, because Rule 317.p provides for "other petrophysical log(s) approved by the Director", operators may propose an alternative (possibly a cased-hole log, or a combination of logs) for the director's approval, as long as the alternative log or logs satisfy all 3 of these requirements:

- 1. Adequately describe the stratigraphy of the wellbore
- 2. Adequately verify the setting depth of surface casing
- 3. Adequately verify any aquifer coverage

The use of an alternative to satisfy the rule will be approved as an Exception to Rule 317.p.

An Exception to Rule 317.p can be based on Option A or Option B:

Option A: Adequate open-hole well log control in nearby well(s) (nearby is in the 600' range)

Option B: Alternate logging program (such as cased-hole neutron and gamma ray logs in lieu of the open-hole resistivity and gamma ray logs)

An APD requesting an Exception to Rule 317.p must have an Exception Request Letter attached which includes all the pertinent information:

Option A: Adequate open-hole well log control in nearby well(s); Exception Request Letter must include:

- 1. API #, well name and well number of nearby well(s) with adequate log(s) currently in the COGCC wellfile
- 2. Approximate distance and bearing from surface location of proposed well to the nearby well(s)
- 3. Document number of well log(s) in COGCC well file(s), type of log
- 4. Statement that the Form 5 will report that no open-hole logs were run per a Rule 317.p Exception.

Option B: Alternate logging program; Exception Request Letter must include:

- 1. Type of alternative log(s) that will be run, specifying open-hole or cased-hole
- 2. Description of the logging program for the entire well, including the interval that will be logged with alternative log(s)
- 3. For a multi-well pad: a statement that the alternative log(s) will be run in one of the first wells drilled on the pad.
- 4. Statement that the Form 5 will report that alternative logs (indicate log type and specify open-hole or cased-hole) were run per a Rule 317.p Exception.
- 5. For a multi-well pad: a statement that the Form 5 on each well on the pad will identify (by API #, well name and well number) the well that was logged with the alternative logs (specifying open-hole or cased-hole). If no open-hole logs were run in each well, make a statement to that effect.

All Rule 317.0 Exception Request letters must also include:

- 1. Well name, number, and legal location, including Quarter-Quarter (or Lot, or Tract), Section, Township, and Range, of proposed well(s)
- 2. Statement that CBL and Gamma Ray will be run in all wells from TD (or KOP in a horizontal well) to at least above the surface casing shoe.
- 3. In a horizontal well, statement that horizontal portion of the well will be logged with a measured-while-drilling Gamma Ray.

A Form 4 may be submitted to request a Rule 317.p Exception as relief from an Open Hole Logging COA or BMP on a previously approved APD.

If the exception and relief is being sought for all the wells on a multi-well pad, a Form 4 need only be submitted for one well on the pad, providing the Form 4 identifies all the wells (by API Number, Well Name & Number) to which the exception will apply.

The Form 4 must include a Rule 317.p Exception Request Letter that meets all of the criteria outlined above.

NOTE: Form 5s must always list all logs run in a well and all those logs must be attached to the Form 5 (per Log Submittal Policy dated 12-23-2013/updated 9/30/2014).