

Wellbore Diagram

10-15-2014

Definition

None

Rule / Policy Citation

303.a(5).

A request to deepen, re-enter, recomplete to a different reservoir, or to drill a sidetrack of an existing well shall be filed on a Form 2, Application for Permit-to-Drill, including details of the proposed work and a wellbore diagram.

Purpose

The Wellbore Diagram provides an illustration and data describing the important components of the current and proposed wellbore configuration.

Requirements

1. A Wellbore Diagram must be attached to the Form 2 submitted to deepen, re-enter, recomplete to a different reservoir, or to drill a sidetrack of an existing well.
2. A wellbore diagram should include all permanent downhole features and diagram labels:
 - a. Diagram Labels:
 - i. Well Name and Number
 - ii. Current and Proposed (both diagrams on the same page or on separate pages)
 - iii. Legal location (Qtr-Qtr, Section, Township, Range, and Principal Meridian)
 - iv. API Number
 - v. County
 - vi. Date of the diagram
 - b. Current Permanent Downhole Features:
 - i. Hole size
 - ii. TD of hole and PBTD
 - iii. Quantity (sacks) of cement placed in hole for conductor, surface, intermediate, production casing and liners, top and bottom of cement, type of cement, yield and slurry weight
 - iv. Casing: size, weight, top and depth, casing tools (DV)
 - v. Perforations depth
 - vi. Formation tops
 - vii. KOPs for sidetracks
 - c. Proposed Permanent Downhole Features:

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- i. Deepened TD
 - ii. Remedial cement placed in hole, top and bottom, quantity, yield, and slurry weight
 - iii. Depth of bridge plugs, retainers, packers, fish, and quantity of cement placed on top of these features, if any.
 - iv. Any changes to the casing configurations.
 - v. New perforations
- d. Injection wells must show the packer and tubing depths.

Common Errors and Issues Encountered by COGCC Staff

1. A Wellbore Diagram is not attached to the Form 2 submitted to deepen, re-enter, recomplete to a different reservoir, or to drill a sidetrack of an existing well.
2. The attached Wellbore Diagram does not include the required diagram labels
3. The attached Wellbore Diagram does not include the required permanent downhole features of the current and proposed wellbore
4. The attached Wellbore Diagram is difficult to understand. Some computer-generated diagrams can be overly complicated with so much detail that the basic information is difficult to decipher. An example of too much detail is showing each joint of casing.

Notes

1. Refer to the "Suggested Wellbore Diagram Guidelines (6/12/2014)" available on the COGCC website for additional information regarding wellbore diagrams. Access the document from the FORMS webpage table, within the Form 2 Instructions, listed in the Form 2 Process Guidance and Instructions.
2. Refer to "Casing and Cement Nomenclature Guidelines (12/10/2013)" available on the COGCC website for expectations regarding naming of casing strings and cement jobs. Access the document from the FORMS webpage table, within the Form 2 Instructions, listed in the Form 2 Process Guidance and Instructions.