

COGCC OPERATOR GUIDANCE

STIMULATION DEFINITION

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Definition Citation (100-Series Rules)

STIMULATION means a treatment performed to restore or enhance the productivity of the formation and falls into two main types of treatment: hydraulic fracturing treatments performed above the reservoir fracture pressure, and matrix treatments performed below the reservoir fracture pressure.

Related Definition Citation

HYDRAULIC FRACTURING TREATMENT shall mean all stages of the treatment of a well by the application of hydraulic fracturing fluid under pressure that is expressly designed to initiate or propagate fractures in a target geologic formation to enhance production of oil and natural gas.

Purpose of Rule

The Commission defined "Stimulation" to describe treatments that are performed to improve the objective oil and gas formation's productivity. There are two main categories of Stimulation: Hydraulic Fracturing Treatments and matrix treatments. The Stimulation definition specifically states that it is a treatment intended to restore or enhance productivity of a *formation*, not a *well*.

Stimulation in shale formations typically takes the form of Hydraulic Fracturing Treatment, which is performed above the formation's fracture pressure to create conducive flow paths from the objective formation to the wellbore. By contrast, matrix treatments, such as an acid formation treatment, are performed below the reservoir formation fracture pressure, with a pressure or volume that is designed to restore a reservoir's natural permeability further away from the wellbore than the typical well maintenance job. Matrix stimulation treatments are not common in Colorado, but they may be used to restore productivity in formations that are amenable to matrix treatments.

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Stimulation does not include acid maintenance jobs that are intended to clean well perforations without enhancing formation productivity beyond incidental entry of acid into the formation close to the wellbore.

Document Change Log

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