Bill Richardson

Governor

Joanna Prukop Cabinet Secretary Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order IPI-356 November 18, 2009

Cimarex Energy Co. of Colorado 600 N. Marienfeld St., Suite 600 Midland, TX 79701

Attention: Zeno Farris

RE: <u>Injection Pressure Increase Request</u>

Hudson 31 Federal Well No. 1 (API: 30-025-31652) Unit H, Sec. 31, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico Through Queen formation perforations from 4190 feet to 4230 feet

Reference is made to your request on behalf of Cimarex Energy Co. (OGRID 162683) received by the Division October 22, 2009, to increase the surface injection pressure limit on the above-named disposal well.

Administrative Order No. SWD-636 approved on August 9, 1996, permitted the Hudson 31 Federal Well No. 1 for injection into the Queen formation at 4190 feet to 4230 feet and allowed a maximum surface injection pressure of 838 psi.

It is our understanding that this well will not take a sufficient volume of water at this pressure limit and a higher pressure limit is needed to enable increased water disposal.

The basis for granting this pressure increase is the step-rate test run by Fesco, on this well in October of 2009. Fesco measured the pressures during this test with surface and downhole pressure gauges. The results from the step rate test data show that an increase in the surface injection pressure for this well is justified and will not result in the fracturing of the injection formation and confining strata.

You are hereby authorized to utilize up to <u>1330 psi</u> as the maximum surface injection pressure on this well provided the tubing size, type, setting depth, and perforation depths do not change. However, you are prohibited from injecting at pressures that would induce fracturing.



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The injection authority granted herein shall terminate one (1) year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 5.9.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected fluid is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

Mark E. Fesmire, P.E.

Director

MEF/tw

cc: New Mexico Oil Conservation Division - Hobbs

United States Bureau of Land Management - Carlsbad