



# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Jon Goldstein**  
Cabinet Secretary

**Jim Noel**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



Administrative Order IPI-364  
March 2, 2010

Chesapeake Operating, Inc.  
P.O. Box 18496  
Oklahoma City, OK 73154-0496

Attention: Shannon Glancy

**RE: Injection Pressure Increase Request**

Smith 4 Federal Well No. 2 (API No. 30-025-36730)  
Unit A, Sec 4, T20South, R33 East, NMPM, Lea County, New Mexico  
Yates Formation

Dear Mr. Glancy:

Reference is made to your request on behalf of Chesapeake Operating, Inc. (OGRID 147179) received by the Division on January 22, 2010 to increase the surface to increase the surface injection pressure limit on the above named well.

This well was approved by the Division for injection into the Bell Canyon and Cherry Canyon members of the Delaware Mountain Group from 3,215 feet to 3,264 feet with SWD-1031 and given a maximum surface injection pressure of 643 psi.

SWD-1031 permitted this well to take only Yates formation waters from the offset producing well, the Smith Federal Well No. 1. The Capital Reef is just below the depth of this well and the Salt interval is 205 feet above the top perf.

The basis for granting this pressure increase is the step-rate test run by Cardinal, on this well on February 17, 2010. The results of the step rate test 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.

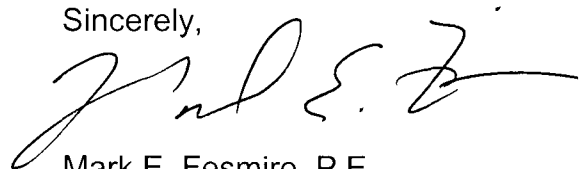


You are hereby authorized to utilize up to **1980 psi** as the maximum surface injection pressure on this well provided the tubing, size, type, and setting depth does not change. However, you are prohibited from injecting at pressures that would induce fracturing.

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 fresh water aquifers are being endangered.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark E. Fesmire', written in a cursive style.

Mark E. Fesmire, P.E.  
Acting Division Director

MEF/tw

cc: Oil Conservation Division – Hobbs  
SWD-1031