



# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Jim Noel**  
Cabinet Secretary

**Karen W. Garcia**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



Administrative Order IPI-385  
November 23, 2010

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

Attention: Shannon Glancy

**RE: Injection Pressure Increase**  
Quail Queen Unit Waterflood Project R-12952  
Lea County, New Mexico

Dear Mr. Glancy:

Reference is made to your request on behalf of Chesapeake Operating, Inc. (OGRID 147179) received by the Division on November 5, 2010 to increase the surface injection pressure on three (3) wells within the Quail Queen Unit Waterflood Project. This request is based upon step rate tests recently conducted on these wells. The results of the step rate tests for the Quail Queen Unit Wells No. 3, 12 and 14 indicate that an increase in the surface injection pressure for these wells is justified and will not result in the fracturing of the injection formation and confining strata.

It is our understanding that these wells will not take a sufficient volume of water at the present pressure limits and a higher pressure limits are needed for waterflood operations.

Based on a step rate injection tests that were conducted in October, 2010 you are hereby authorized to increase the surface injection pressure on the following wells all located in Township 19 South, Range 34 East, NMPM, Lea County, New Mexico:



WELL NUMBER	SURFACE INJECTION PRESSURE
Quail Queen Unit No. 3 API No. 30-025-26221, Unit I, Section 11	1804 PSIG
Quail Queen Unit No. 12 API No. 30-025-22841, Unit G, Section 11	2098 PSIG
Quail Queen Unit No. 14 API No. 30-025-25493, Unit G, Section 14	1952 PSIG

Provided the tubing size, packer setting depth and perforation depths do not change. However, you are prohibited from injecting at pressures that would induce fracturing.

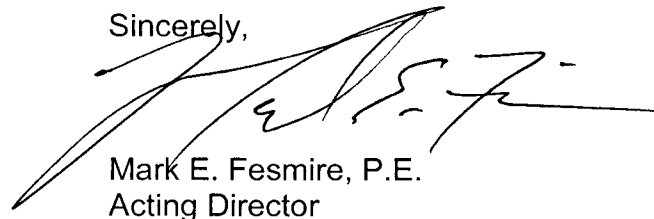
The operator is responsible for ensuring injected waters do not migrate upward inside or outside of this casing and enter formations above the permitted injection interval.

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.

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

Sincerely,



Mark E. Fesmire, P.E.  
Acting Director

MEF/tw

cc: Oil Conservation Division – Hobbs  
New Mexico State Land Office