



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order IPI-308
December 15, 2008

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

Attention: Doug Rubick

**RE: Injection Pressure Increase
Old Indian Draw Unit Waterflood Project
Lea County, New Mexico**

Dear Mr. Rubick:

Reference is made to your request on behalf of Chesapeake Operating, Inc. (OGRID 147179) received by the Division on December 1, 2008 to increase the surface injection pressure on eight (8) wells within the Old Indian Draw 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 Old Indian Draw Unit Wells No. 2, 5, 6, 10, 11, 12, 16 and 21 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.

These wells were first approved by the Division for injection with Hearing Order R-6352 and Administrative Order WFX-520. These wells were last approved by the Division for injection pressure of 800 psig with an OCD Administrative Order dated September 10, 1992.

Five (5) of the wells on this order were ordered shut-in as per Letter of Violation No. 2-08-166 from the OCD Artesia office dated November 5, 2008. OIUD No. 2, No. 4, No. 10, No. 11 and No. 16 were 70 to 80 psig over the allowable and OIUD No. 21 was



300 psig over the allowable injection pressure of 800 psig.

This request is based on a step rate injection tests that was conducted on the 8 wells in June of 2008. The step rate tests data shows that approval of the request will not result in the fracturing of the injection formation and confining strata.

You are therefore authorized to increase the surface injection pressure on the following wells all located in Township 22 South, Range 28 East, NMPM, Lea County, New Mexico:

WELL NUMBER	<i>SURFACE INJECTION PRESSURE</i>
Old Indian Draw Unit No. 2 API No. 30-015-21391, Unit O, Section 18	946 psig
Old Indian Draw Unit No. 5 API No. 30-015-21618, Unit G, Section 18	880 psig
Old Indian Draw Unit No. 6 API No. 30-015-21619, Unit K, Section 18	940 psig
Old Indian Draw Unit No. 10 API No. 30-015-21843, Unit C, Section 18	1046 psig
Old Indian Draw Unit No. 11 API No. 30-015-21844, Unit A, Section 19	960 psig
Old Indian Draw Unit No. 12 API No. 30-015-21845, Unit E, Section 18	972 psig
Old Indian Draw Unit No. 16 API No. 30-015-21959, Unit M, Section 7	1026 psig
Old Indian Draw Unit No. 21 API No. 30-015-22101, Unit O, Section 7	934 psig

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.

Sincerely,



Mark E. Fesmire, P.E.

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Director

MEF/tw

cc: Oil Conservation Division – Artesia
New Mexico State Land Office
File: WFX-520.
File: Case No. 6883
