

State of New Mexico  
Energy, Minerals and Natural Resources Department

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**Susana Martinez**  
Governor

**David Martin**  
Cabinet Secretary

**Brett F. Woods, Ph.D.**  
Deputy Cabinet Secretary

**David R. Catanach, Division Director**  
Oil Conservation Division



Administrative Order IPI-484  
February 18, 2015

Mr. Robbie Grigg  
Cross Timbers Energy, LLC  
400 West Seventh Street  
Fort Worth, TX 76102

**RE: Injection Pressure Increase**

Injection Authority: Division Order No. R-3134, as amended, and Order WFX-927

Pool: Maljamar; Grayburg-San Andres (Pool code 43329)

Three injection wells in the Southeast Maljamar Grayburg-San Andres Waterflood Project

Dear Mr. Grigg:

Reference is made to your request on behalf of Cross Timbers Energy, LLC (OGRID 298299) received by the Division on November 24, 2014, to increase the maximum allowed surface tubing pressure on the three referenced wells.

These wells were permitted by the Division for injection of produced water through perforations in the Grayburg-San Andres formations by Administrative Order WFX-927 approved August 20, 2014. The maximum surface tubing pressure approved by the administrative order was based on the gradient of 0.2 pounds per square inch (psi) per foot and calculated based on the depth of the shallowest perforation in each well.

It is our understanding that the operator proposes to increase the efficiency of the waterflood and consequently, a higher pressure limit is needed. It is also understood that an increase will not result in the fracturing of the formation and confining strata.

Based on step-rate tests for these wells through 2 $\frac{3}{8}$ -inch tubing, you are hereby authorized to inject at the following maximum surface tubing pressure:

API No.	Well No.	ULSTR	SRT Test Date	Maximum Injection Pressure	Pressure Gradient (in psi/ft)
30-025-26512	Southeast Maljamar GB/SA Unit No. 105	J-30-17S-33E	9/29/2014	1950 psi	0.49
30-025-37897	Southeast Maljamar GB/SA Unit No. 617	K-29-17S-33E	10/27/2014	2320 psi	0.54
30-025-31444	Southeast Maljamar GB/SA Unit No. 906	A-32-17S-33E	10/28/2014	1420 psi	0.33

This approval is based on the provision that the tubing size, packer setting depth and completion interval for these wells does not change. Any future requested pressure increase will require resubmission of additional data and a new step-rate test. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in these wells. This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 19.15.5.9 NMAC.

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

Sincerely,



DAVID R. CATANACH  
Director

DRC/prg

cc: Oil Conservation Division – Hobbs District Office  
WFX-927  
Well Files 30-025-26512, 30-025-37897, and 30-025-31444