State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary David R. Catanach, Division Director Oil Conservation Division



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Administrative Order IPI-491 July 27, 2015 Administrative Application Reference No. pJAG152038521

Ms. Denise Pinkerton Chevron USA, Inc. 15 Smith Road Midland, TX 79705

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

Injection Permit: Order No. R-5530 Pool: Vacuum; Grayburg-San Andres (Pool code 62180) Three injection wells in the Central Vacuum Unit Waterflood Project

Dear Ms. Pinkerton:

Reference is made to your request on behalf of Chevron USA, Inc. (OGRID 4323) received by the Division on July 22, 2015, to increase the maximum allowed surface tubing pressure on the three referenced wells.

These wells were permitted by the Division for pressure maintenance in the San Andres formation by Division Order No. R-5530 approved September 20, 1977. Order No. R-5530-E permitted the expansion of the Central Vacuum Unit Tertiary Recovery Project and approved the injection of produced water alternating with gas (carbon dioxide and produced gases) into the San Andres formation. Division Order No. R-5530-F allowed increases in the maximum surface injection pressures for existing wells within the "EOR Project Area".

It is our understanding that the applicant is requesting an increase in the maximum surface injection pressure <u>for water only</u> in order to enhance the tertiary recovery process. 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 2³/₈-inch tubing, you are hereby authorized to inject at the following <u>maximum surface tubing pressure:</u>

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API No.	Well No.	ULSTR	SRT Test Date	Maximum Injection Pressure	Pressure Gradient (in psi/ft)
30-025-25798	Central Vacuum Unit No. 113	L-6-18S-35E	6/29/2015	2200 psi	0.51
30-025-27971	Central Vacuum Unit No. 161	M-36-17S-34E	6/18/2015	2400 psi	0.55
30-025-38849	Central Vacuum Unit No. 238	P-36-17S-34E	6/30/2015	2300 psi	0.53

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/mam

cc: Oil Conservation Division – Hobbs District Office Bureau of Land Management – Carlsbad Well Files 30-025-25798, 30-025-27971, and 30-025-28849