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



Administrative Order IPI-489 July13, 2015

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)

Six 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 6, 2015, to increase the maximum allowed surface tubing pressure on the six 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 2%-inch tubing, you are hereby authorized to inject at the following <u>maximum surface tubing pressure:</u>

API No.	Well No.	ULSTR	SRT Test Date	Maximum Injection Pressure	Pressure Gradient (in psi/ft)
30-025-30104	Central Vacuum Unit No. 242	A-36-17S-34E	6/19/2015	2350 psi	0.56
30-025-25818	Central Vacuum Unit No. 46	A-31-17S-35E	6/11/2015	2500 psi	0.58
30-025-25712	Central Vacuum Unit No. 101	G-6-18S-35E	6/11/2015	2475 psi	0.64
30-025-25730	Central Vacuum Unit No. 82	K-36-17S-34E	6/10/2015	2075 psi	0.49
30-025-25732	Central Vacuum Unit No. 84	I-36-17S-34E	6/09/2015	2300 psi	0.53
30-025-35729	Central Vacuum Unit No. 74	L-31-17S-35E	6/25/2015	2525 psi	0.58

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.

This Administrative Order supersedes Administrative Order IPI-147 for the Central Vacuum Unit No. 242, issued on October 19, 2000. Further this Administrative Order supersedes IPI-243 for the Central Vacuum Unit No. 84, issued on October 12, 2004.

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 30-025-25818, 30-025-25712, 30-025-30104, 30-025-25732, 30-025-25730,

and 30-025-25729