State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

Ken McQueen Cabinet Secretary

Matthias Sayer Deputy Cabinet Secretary **David R. Catanach, Division Director**Oil Conservation Division



Administrative Order IPI-510 April 17, 2017 Administrative Application Reference No. pWVJ1710065348

Ms. Cindy Herrera Chevron U.S.A. Inc. 15 Smith Road Midland, TX 79705

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

Central Vacuum Unit Tertiary Recovery Project Vacuum Grayburg San Andres Pool (62180)

Dear Sir or Madame:

Reference is made to your request on behalf of Chevron U.S.A. Inc. (OGRID 4323) received on March 2, 2017, to increase the maximum allowed surface tubing pressure on the following well(s):

Well No.	API Number	ULSTR	Order Allowing Injection	Existing Pressure Limit, Psi	Existing Tubing OD, In.
CVU #133	30-025-25994	B-12-18S-34E	R-5530-A	1795	2-3/8
CVU #135	30-025-25996	L-6-18S-35E	R-5530-A	1120	2-3/8
CVU #342	30-025-38002	A-36-17S-34E	WFX-822	1450	2-3/8
CVU #459	30-025-38641	D-31-17S-35E	WFX-835	1500	2-3/8

It is our understanding that the requested pressure increase is needed to increase the rate of injection and this pressure increase will not result in the fracturing of the formation and confining strata.

Based on the results of the submitted step rate injection test(s), the following shall be the new pressure limit(s) while equipped with **injection** tubing:

Well No.	Step Rate Test Date	New Pressure Limit	While Injecting	Injection Interval, Feet	Pressure Gradient (in psi/ft)
CVU #133	7/8/16	1600	water	4543 to 4647	0.35
CVU #135	2/2/17	1120	water	4341 to 4695	0.26
CVU #342	2/22/17	1840	water	4334 to 4778	0.42
CVU #459	2/3/17	1700	water	4367 to 4822	0.39

This approval is based on the provision that the tubing size, packer setting depth and completion interval for the well(s) does not change. Any future requested pressure increase will require resubmission of additional data and/or 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 the well(s). 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 any injection permit 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/wvjj

cc: Oil Conservation Division – Hobbs District Office

State Land Office - Oil, Gas, and Minerals Division

Well File(s), Case 6256 (R-5530-A), WFX-822, WFX-835