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 511 April 17 2017 Administrative Application Reference No pWVJ1710066855

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

RE <u>Injection Pressure Increase</u>

Vacuum Grayburg San Andres 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
VGSAU #17	30 025 24316	I 2 18S 34E	Case 485? R 444?	1500	2 3/8
VGSAU #13?	30 025 36683	I ? 18S 34F	WFX 801	1510	2 7/8
VGSAU #134	30 075 36681	K I 18S 34F	WFX 807	1550	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 strate

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 Limut	While Injecting	Injection Interval Feet	Pressure Gradient (in psi/ft)
VGSAU #17	7/8/16	2000	water	4260 to 4837	0 47
VGSAU #132	2/7/17	2000	water	4370 to 4572	0 46
VGSAU #134	2/23/17	2000	water	4260 to 4837	0 47

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

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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 inj fresh with injufer

Sincerely

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DAVID R CATANACH

DRC/wvjj

cc Oil Conservation Division – Hobbs District Office State Land Office Oil Gas and Minerals Division Well File(s) Case 13961 WFX 801 WFX 802