

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-
May 27, 2

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

Submit to appropriate District Of

☐ AMENDED REPC

MAY 27 2008

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN
PLUGBACK, OR ADD A ZONE

HOBBS OCD

¹ Operator Name and Address CHEVRON U S A INC 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRID Number 4323
		³ API Number 30 - 025-30844
³ Property Code 30022	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	⁶ Well No 143
⁹ Proposed Pool 1 VACUUM GRAYBURG SAN ANDRES		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no H	Section 1	Township 18-S	Range 34-E	Lot Idn	Feet from the 1980	North/South line NORTH	Feet from the 1250	East/West line EAST	County LEA
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⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Additional Well Information

¹¹ Work Type Code D	¹² Well Type Code O	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3983'
¹⁶ Multiple NO	¹⁷ Proposed Depth 5000'	¹⁸ Formation GRAYBURG SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit Liner Synthetic <input type="checkbox"/> mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls		Drilling Method Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>		
Closed-Loop System <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

CHEVRON U S A INC INTENDS TO ADD PERFS IN THE LOWER SAN ANDRES & SAN ANDRES TRANSITION ZONE. ADDING THE TZ PERFS WILL FIRST REQUIRE FISHING 121' OF FIBERGLASS DESANDING EQPT & DRILLING CMT FR 47904900. THIS WELL WORK IS PART OF THE VGSAU PH 1A CO2 EXPANSION PROJECT

THE INTENDED PROCEDURE IS ATTACHED FOR YOUR APPROVAL

A PIT WILL NOT BE USED FOR THIS DEEPENING

Permit Expires 2 Years From Approval
Date Unless Drilling Underway
Deepen

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Signature <i>Denise Pinkerton</i>		Approved by <i>Chris Williams</i>	
Printed name DENISE PINKERTON		Title. OC DISTRICT SUPERVISOR / GENERAL MANAGER	
Title. REGULATORY SPECIALIST		Approval Date MAY 28 2008 Expiration Date.	
E-mail Address: LEAKEJD@CHEVRON.COM			
Date 05-23-2008	Phone 432-687-7375	Conditions of Approval Attached <input type="checkbox"/>	

VGSAU No. 143
API No. 30-025-30844
Vacuum (Grayburg-San Andres) Field
Lea County, NM

Workover Procedure

1. Rig up pulling unit. ND wellhead. NU BOP.
2. TOH w/ 2-7/8" production tubing and submersible pump.
3. TIH w/ 6-1/8" shoe, 2 joints wash pipe, jars and 6 3-1/2" drill collars on 2-7/8" workstring.
4. Rig up reverse unit and power swivel.
5. Wash over fiberglass de-sanders from 4612' to 4733' and pull out of the hole.
Note: The casing is perforated at 8+ JSPF between 4389 and 4409'. The casing across this interval may be non-existent. TOH.
6. TIH w/ 6-1/8" mill tooth bit and 6 3-1/2" drill collars on 2-7/8" workstring. Drill out scale and cement to 4900'. **Note: Original PBD was 4790'. Assume that cement will be encountered from 4790' to 4900'.** Circulate hole clean. Spot 500 gallons 10% acetic acid from 4900' to 4650'. TOH.
7. Rig up Baker Atlas. Get on depth with Halliburton GR-Depth Control Log dated 9/18/1996; there is a possible short (?) joint from 4097' to 4116'+.
8. Perforate the 7" casing w/ 2 JSPF @ 120 degree phasing as follows: 4658'-72', 4676'-92', 4696'-4708', 4710'-16', 4720'-24', 4726'-36', 4740'-49', 4756'-64', 4767'-72', 4774'-81', 4786'-99', 4810'-20', and 4824'-4844'.
9. TIH w/ 7" treating packer on 2-7/8" workstring and set at 4640'. Acidize perfs 4658' - 4844' (134' net) w/ 7,000 gallons 15% HCl in 4 stages. Drop rock salt for diversion. Pump acid at 5-7 BPM. Do not exceed 5000 psi maximum pressure. **If packer will not set in casing, TOH w/ packer and TIH w/ open ended workstring with Vortech pulsating bit sub and acidize.**
10. Shut in one hour. Flow back load. TOH.
11. Rig up Baker Atlas. Perforate the 7" casing w/ 2 JSPF @ 120 degree phasing as follows: 4534'-40', 4546'-60', 4563'-72', 4581'-88', 4590'-94', 4599'-4608', 4624'-30', and 4638'-40'.
12. TIH w/ 7" RBP and treating packer on 2-7/8" workstring. Set RBP @ 4650'. Pull up and set packer at 4480'.
13. Acidize perfs 4492' - 4640' with 3,000 gallons 15% HCl in two stages. Drop rock salt for diversion. Pump acid at 5-7 BPM. Do not exceed 5000 psi maximum pressure.
14. Shut in one hour. Flow back load.
15. Squeeze perfs with scale inhibitor.
16. Release packer. Drop down and release RBP. TOH.
17. TIH w/ 6-1/8" mill tooth bit on 2-7/8" workstring and wash down to 4900'. TOH.
18. TIH w/ submersible pump on 2-7/8" production tubing.
19. ND BOP. NU wellhead.
20. Place well on production and test.

PTB 5/20/08

VGSAU #143 Wellbore Diagram

Created: 05/17/05 By: MAB
 Updated: 12/20/07 By: BSPT
 Lease: Vacuum Grayburg San Andres Unit
 Field: Vacuum Grayburg San Andres Unit
 Surf. Loc.: 1980' FNL & 1250' FEL
 Bot. Loc.:
 County: Lea St.: NM
 Status: Active Oil Well

Well #: 143 St. Lse: 857948
 API: 30-025-30844
 Unit Ltr.: H Section: 1
 TSHP/Rng: S-18 E-34
 Unit Ltr.: Section:
 TSHP/Rng:
 Directions: Buckeye, NM
 CHEVNO: KV1728

Surface Casing

Size: 13 3/8"
 Wt., Grd.: 48 & 54.5#
 Depth: 1560'
 Sxs Cmt: 1700
 Circulate: 180 sx
 TOC: Surface
 Hole Size: 17 1/2"

Intermediate Casing

Size: 9 5/8"
 Wt., Grd.: 36#, K-55
 Depth: 2800'
 Sxs Cmt: 1570
 Circulate: 510 sx
 TOC: Surface
 Hole Size: 12 1/4"

Production Casing

Size: 7"
 Wt., Grd.: 26#, J-55
 Depth: 5000'
 Sxs Cmt: 900
 Circulate: 30 sx
 TOC: Surface
 Hole Size: 8 3/4"

Perforations

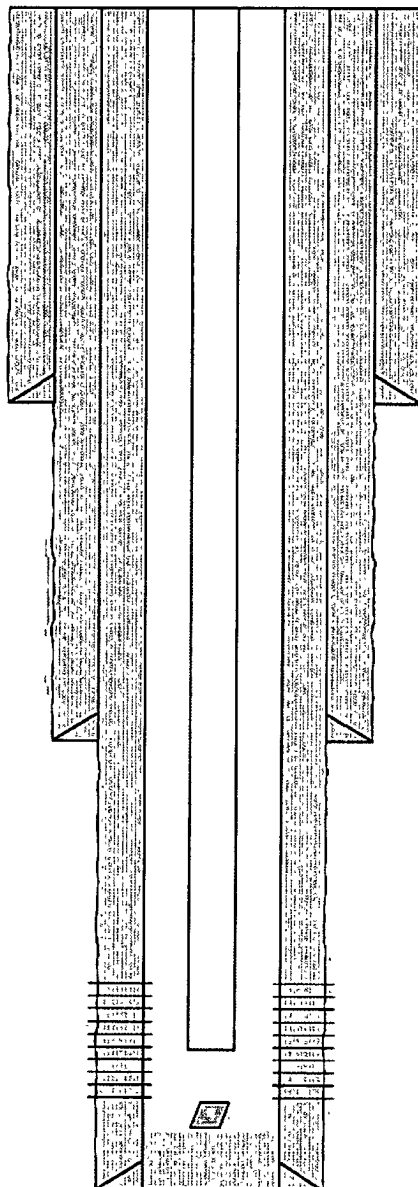
4208' - 4410' 2 jspf
 4389' - 4409' 8 jspf
 4429' - 4624' 2 jspf

Tubing

2 7/8" L-80 6.4# @4501'

Submersible Pump

4501' - 4536'



KB: 3996'

DF:

GL: 3983'

Ini. Spud: 08/21/90

Ini. Comp.: 09/17/90

History

9/19/90 Initial Completion: Perf 2 jspf 4429-34, 36-38, 46-48, 64-72, 92-96, 4501-06, 15-20, 30-32, 72-76, 4614-24. Acid w/ 5200 gals 15% NEFE. Set RBP @ 4414'. perf 2 jspf 4208-18, 4330-34, 48-50, 56-60, 74-76, 80-82, 84-86, 91-93, 4396-4400, 04-06, 08-10. Acid w/ 4200 gals 15% NEFE. TOH w/ RBP.

9/27/96 Frac. C/O to 4768'. Drop sand to 4544' (Top LSA). Perf 8 jspf 4389'-4409' (20', 160 holes, 0.45"). Fracture perfs 4208'-4532' w/ 35,000 gls 40# XL, 76,000 # 16/30 Ottawa & 24,000# 16/30 curable RC. Pmax=4583 psi, AIR=35 bpm. C/O to 4790'

6/23/97 DHS, Acidize: Pump full of scale & iron. C/O; acid (vol?) and squeeze.

9/7/04 Acidize: TOH w/ tbg dragging TAC was set on perfs. Left 2- 3 1/2" FG filters in hole (60.82"). TIH w/ shoe. Tag @ 4612' Wash over to 4672'. Tried to core but almost got stuck @ 4673'. Could not fish filters. TIH w/ pkr @ set @ 4116'. Pump 6000 gls 15% HCl acid. ISIP=Vacuum. Swab load back.

5/7/05 DHS, Acidize: Pulled Pump. TIH w/ csg scraper. TIH w/ bit + bailer. C/O to 4634'. Pulled bit. Ran pkr. Pumped 2000 gls. Pulled pkr. C/O rock salt.

San Andres Perfs: 4208' - 4624'

Top of FG Desander @ 4612'

Bottom of FG Desander @ 4733'

PBTD: 4,790

TD: 5,000

Chevron U.S.A. Inc. Wellbore Diagram : VGSAU 143

