

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-101
May 27, 2004

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

Submit to appropriate District Office

☐ AMENDED REPORT

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

¹ Operator Name and Address CHEVRON U.S.A. INC. 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRID Number 4323
		³ API Number 30 - 025-36681
³ Property Code 30022	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	⁶ Well No. 134
⁹ Proposed Pool 1 VACUUM GRAYBURG SAN ANDRES		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no. K	Section 1	Township 18-S	Range 34-E	Lot Idn	Feet from the 2630	North/South line SOUTH	Feet from the 1980	East/West line WEST	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 I	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3985'
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"/> mls thick Clay <input type="checkbox"/> Pit Volume: _____ bbls		Drilling Method: Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input checked="" type="checkbox"/> Gas/Air <input type="checkbox"/>		
Closed-Loop System <input checked="" 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 DEEPEN THE SUBJECT WELL FROM 4449' TO 5000'

THE INTENDED PROCEDURE IS ATTACHED FOR YOUR APPROVAL.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway
Deepen

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

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 ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Signature:

Printed name: DENISE PINKERTON

Title: REGULATORY SPECIALIST

E-mail Address: LEAKEJD@CHEVRON.COM

Date: 9-11-07

Phone: 432-687-7375

OIL CONSERVATION DIVISION

Approved by:

Title: OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date:

SEP 15 2007

Expiration Date:

Conditions of Approval Attached ☐

VGSAU No. 134

API No. 30-025-36681 *K-1-18534E*

Vacuum (Grayburg San Andres) Field

Lea County, NM

Workover Procedure

1. Rig up pulling unit. ND wellhead. NU BOP.
2. Release packer set @ 4153'. TOH w/ duoline injection tubing laying down.
3. TIH w/ 5-1/2" packer on 2-7/8" workstring and set at 4100'.
4. Rig up cementers and squeeze perfs 4217' – 4420' w/ 75 Sx Class "H" neat cement. Displace cement to 4150'. Open packer bypass and reverse tubing clean. Release packer and TOH.
5. TIH w/ 4-3/4" mill tooth bit, 6 3-1/2 drill collars on 2-7/8" workstring.
6. Drill out cement. Drill out float shoe at 4449' and continue to drill open hole to 5000'. Circulate hole clean and TOH.
7. Rig up Schlumberger and run Platform Express log suite from 5000' to 4450'.
8. Rig up casing crew. Run 4" 9.5#/ft, J-55 FJ liner from the bottom up as follows:
 - a. 4" guide shoe
 - b. 1 jt 4" casing
 - c. 4" float collar
 - d. 30 jts (1200') 4" casing
 - e. 4" X 5-1/2" liner hanger
 - f. 2-7/8" workstring to surface.
9. Rig up cementers and cement liner with 90 sacks (100% excess).
10. Release workstring off of liner hanger and reverse circulate tubing clean. TOH.
11. RIH w/ 4" liner top dressing tool and drill collars on 2-3/8" workstring.
12. Dress top of liner at 3760'. TOH.
13. TIH w/ 3-1/4" bit and drill collars on 2-3/8" workstring. Tag TD. Drill out to 4950' if necessary. Test liner to 1000 psi. TOH laying down workstring.
14. Rig up Baker Atlas and pull GR-CBL-CCL log from PBTD to 2950'. Pull repeat section of bond log at 0 psi and the main logging run at 1000 psi casing pressure.
15. Perforate the Main San Andres Pay (est. 240' net) and Transition Zone (est. 70' net) intervals w/ 2 JSPF @ 120 degree phasing.
16. RIH w/ 4" injection packer and on-off tool w/ 1.5" profile nipple on 2-3/8" duoline tubing. Set packer @ 4250'. Acidize perforated interval w/ 8,000 gallons 15% NEFE HCl in 8 stages using XX ball sealers per stage and by dropping 2000 lbs rock salt in 25 bbls gelled brine between stages. Shut-in 2 hours and flow back load.
17. Perform MIP test.
18. ND BOP, NU wellhead. RDPU.
19. Place well on injection.
20. After 2 months, run injection profile.

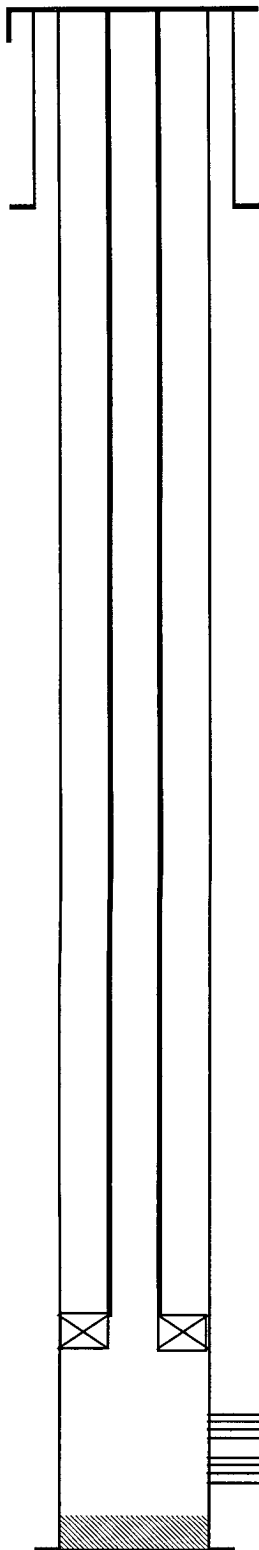
PTB 8/13/2007

Lease Name: VGSAU
Well No. 134
Location: 2630 FSL & 1980' FWL
Sec.: 1
Block:
Survey:

Field: Vacuum
Reservoir: Grayburg-San Andres
GE: 3985'
KB: 3991'
DFE:
Status: WTR. INJ.

API No. : 30-025-36882
REFNO: HO9423
Spud Date:
Comp. Date: 6/28/2004
County: LEA
State: NEW MEXICO
L5/L6:

EXISTING WELLBORE DIAGRAM



Hole Size: 12 1/4"
Csg. Size: 8 5/8" 24" J-55
Set @: 1551'
Sks. Cmt.: 820 SKS
TOC @: SURFACE
Circ: Y/N: Y; 118 SKS

PACKER @ 4153'

SAN ANDRES PERFS:
4217' - 4420'

Hole Size: 7 7/8"
Csg. Size: 5 1/2" OD 15.5# J-55
Set @: 4449'
Sks. Cmt.: 1050 SKS
TOC @: 1400' - CBL
Circ: Y/N: Y; 171 SKS

TD: 4449'
PBD: 4439'

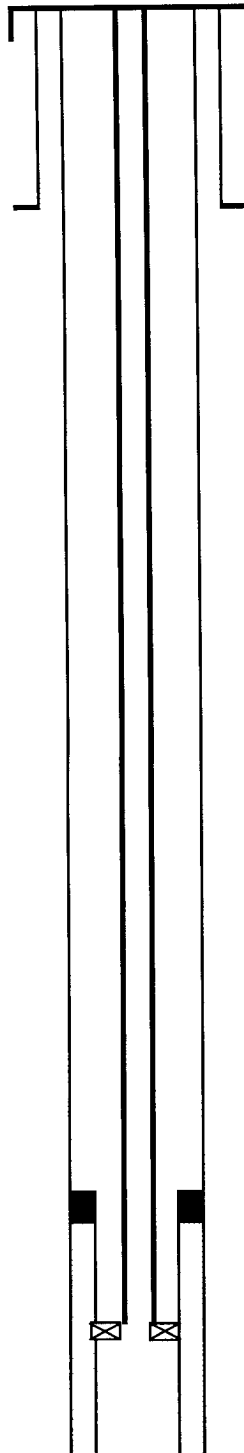
Updated: 9/6/2007

By: PTBP

Lease Name: VGSAU
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Location: 2630 FSL & 1980' FWL
Sec.: 1
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Reservoir: Grayburg-San Andres
GE: 3985'
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DFE:
Status: WTR. INJ.

API No. :
REFNO:
Spud Date:
Comp. Date:
County:
State:
L5/L6:



PROPOSED WELLBORE DIAGRAM

Hole Size: 12 1/4"
Csg. Size: 8 5/8" 24" J-55
Set @: 1551'
Sks. Cmt.: 820 SKS
TOC @: SURFACE
Circ: Y/N: Y; 118 SKS

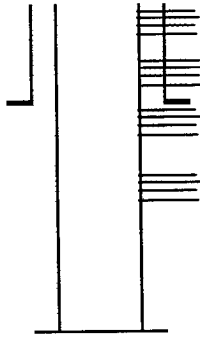
2-3/8" FIBERLINED INJ. TUBING

TOP OF 4" LINER @ 3760'

PACKER @ 4250'

SAN ANDRES PERFS:

Hole Size: 7 7/8"
Csg. Size: 5 1/2" OD 15.5# J-55
Set @: 4449'



4260' - 4850'

Sks. Cmt.:	1050 SKS
TOC @:	1400' - CBL
Circ: Y/N:	Y; 171 SKS

Hole Size:	4-3/4"
Csg. Size:	4" 9.5# J-55 FJ
Set @:	5000'
Sks. Cmt.:	90
TOC @:	3760' - LINER TOP

Updated:	9/6/2007
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