

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

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

Form C-101

May 27, 2004

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, TX 79705		² OGRID Number 4323
³ Property Code 30022		⁴ API Number 30 - 025-02273
⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT		⁶ Well No. 22
⁹ Proposed Pool 1 VACUUM GRAYBURG SAN ANDRES		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	2	18-S	34-E		1980'	SOUTH	1980'	WEST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface

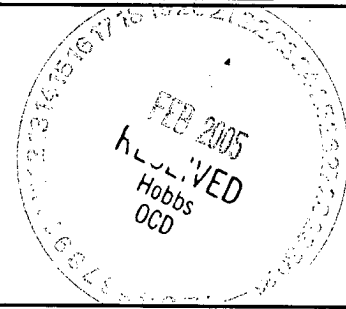
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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 4013'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4900'	¹⁸ Formation GRAYBURG SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date 2-23-05
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: _____ Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
NO CHANGE					



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 TO 4900'.

LAST CLEAN OUT WAS IN 9-02-04. C/O DEPTH WAS 4710'. DEEPENED IN 5-15-74 FR 4710-4755.

PLUGGED BACK IN 12-22-98 TO 4700'.

PLEASE SEE ATTACHED PAGE FOR INTENDED PROCEDURE.

CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.

*** A PIT WILL NOT BE USED FOR THIS DEEPENING. A STEEL FRAC TANK WILL BE UTILIZED. ***

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 ☐.

Printed name: DENISE PINKERTON

Title: REGULATORY SPECIALIST

E-mail Address: LEAKEJD@CHEVRONTXACO.COM

Date: 2-17-05

Phone: 432-687-7375

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

FEB 23 2005

Conditions of Approval Attached ☐

Permit Expires 1 Year From Approval
Date Unless Drilling Underway Deepening

PETROLEUM ENGINEER

VI- Procedure:

- 1- **MIRU**. ND well head & NU BOP.
- 2- **Pull Out Rods**. TOH w/ rods. L/D rods. Inspect for replacement. Evaluate pump condition and replace if required.
- 3- **Pull Out Tubing**: Unset TAC. TOH w/ tubing. Inspect visually.
- 4- **Clean Out**: P/U 4 3/4" bit, 10 Drill Collars (4 1/4" x 2" ID or 1 3/4" ID – 37.5#/ft or 40#/ft) and 2 7/8" tubing. TIH to tag and clean out to PBTD @ 4710'. Drill from 4710' to 4900'. If we find signs of water flow STOP immediately. That will be new TD point. Short trip. C/O to 4900'. TOH and lay down DC's and bit.
- 5- **Log Well**: R/U Schlumberger. Run Spectral GR, Neutron Density w Pe., Resistivity Logs w/ Rxo tool, Sonic Log. From 4333' to 4900'.
- 6- **Stimulate Open Hole**: TIH w/ 2 7/8" tubing and 5 1/2" packer. Set @ 4230'. Pump 6000 gls 15% acid in 3 stages (2000 gls each) w/ 4000 # rock salt. This will account for 3 feet of penetration from the top of the San Andres to the PBTD.
- 7- **Run Production Equipment**: Run production tubing and rods. Upsize rod pump. Set pump at same depth. Optimum Pump design is:

Previous Production: = Oil Rate + Water Rate
 = 15*1.2 + 300 = **318** bpd
Incremental Production = 10 Oil + 100 Water = 110
New Production = 428 bpd
- 8- **Return well to Production.**

Prepared by
Mario A. Ballesteros

VGSAU 22

API # 30-025-022730001

DATE: 16-Feb-05

1980' FSL & 1980' FWL

SEC 2, TWN 18-S, Range 34-E, County Lea

ELEVATION: 4013' GL, 4022' DF

Completed: 12/27/1940

ACTUAL WELLBORE DIAGRAM

Surface Casing:

12 1/4" hole
8 5/8" csg - 32# 8V
set @ 1688'. Cemented w/ 300 sx
class "C" in 1940. Perforated @
1713' and pump 770 Sx in dec-1980.

Production Casing:

6 3/4" hole
5 1/2" csg - 15#
set @ 4333'. Cemented w/ 200 sx in
12/19/1940.

Cement Job:

Perforated @ 1713' and pump 770 Sx
to surface.

Zones

Top	Depth	Interval
GB Marker	4,426	
GB Dol Top	4,547	51
GB Dol Bott	4,598	
San Andres	4,666	44
PBTD	4,710	
O/W	4,720	
LSA		

TOTAL

95

Completion:

1940: Open Hole: 4 3/4" f/ 4333' to 4710'.

12/11/98-12/22/98: Drill 1" laterals Hydraulically.
@ 4648' two laterals were drilled with 1" jet nozzle
400' into the formation.

@ 4658' four laterals were drilled with 1" nozzles
400' into the formation

Workover History:

11/10/1972: **Frac Open Hole:** Ran GR-N log. Ran 3" Frac tbg.
Fraced open hole f/ 4333' to 4668' in 3 stgs. 18200 # 20/40 mesh,
6000 # 10/20 sand w/ 33000gls lease crude oil.

5/15/1974: **Deepen & Stimulation:** C/O to 4710'. Deepen to 4755'.
Ran GR-N log f/ 4749'-4000'. Acid open hole f/ 4692' to 4755' w/
3000 gls 20% NEA. Reset pkr @ 4282'. Acid open hole f/ 4333' to
4750' w/ 2600 gls 20% NEA in 2 stgs.

12/12/1980: **Cement 5 1/2"-8 5/8" Annular.** Perf @ 1713' and
pump 770 Sx cl "H" cmt to surface.

4/18/90: **Stimulation:** C/O to 4755'. Pump 2000 gls acid.

12/23/1991: **Pump:** Valve rod and rod guides corroded.

7/22/1992: **Tubing Failure**

3/19/1997: **Tubing Failure:** 2 JTS above SN

12/11/98-12/22/98: **Drill 4-1" laterals.** Two @ 4648' & Two
4658'. C/O to 4700'.

3/25/2003: **Pump:** Split in pump barrel

8/24/04 - 9/02/2004: **Stimulation:** TOH w/ tbg (147 Jts total). C/O
f/ 4689' to 4710'. TIH w/ pkr & set @ 4230'. Test to 300 psi.
Annulus leaked 200# in 3 min. Pump 2500 gls 15% acid. ISIP =
1400 psi. Swabbed load back. SIS. TOH w/ Pkr. TIH w/ RBP &
Pkr. Isolate leaks. Leak @ wellhead on 5 1/2" riser. R/D and repair
leak. Pull RBP. Ran 2 7/8" Prod tbg w/ pump and new rods. TAC
@ 3961'. Ran 146 JTS total.

PBTD @ 4710'

TD @ 4755'

PRODUCTION COMMENTS

VGSAU 22

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12/19/1940.

Cement Job:

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4648' two laterals were drilled with 1" jet nozzle 400'
into the formation.

@ 4658' four laterals were drilled with 1" nozzles 400'
into the formation

Feb/2005: New Open Hole: 4 3/4: 4333' - 4900'

Workover History:

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@ 3961'. Ran 146 JTS total.

PBTD @ 4710'

TD @ 4755'

PROPOSED NEW PBTD @ 4900'

New Wellbore Size: 4 3/4"

PRODUCTION COMMENTS