

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, 2

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

RECEIVED

APR 28 2008

HOBBS OCD

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

☐ AMENDED REPC

¹ Operator Name and Address CHEVRON U S A INC 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRIN Number 4323
		³ API Number 30-025-02247
³ Property Code BDD22	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	⁶ Well No. 43
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 484	East/West line EAST	County 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 (Deepen)	¹² Well Type Code OIL	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3981'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4850'	¹⁸ Formation GRAYBURG S/A	¹⁹ Contractor	²⁰ Spud Date
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit	Liner. Synthetic ☐ _____mils thick Clay ☐	Pit Volume _____bbls		Drilling Method Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐
Closed-Loop System ☐				

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 INTO THE SAN ANDRES TRANSITION ZONE FROM 4710-4850 THE WELL IS CURRENTLY A SAN ANDRES MAIN PAY OPEN HOLE COMPLETION FROM 4090-4710. AFTER DEEPENING, THE NEW OPEN HOLE SECTION WILL ACIDIZED WITH 4000 GALS 15% HCL.

A PIT WILL NOT BE USED FOR THIS DEEPENING

THE INTENDED PROCEDURE & WELLBORE DIAGRAM IS ATTACHED FOR YOUR APPROVAL.

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 ☐ 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: 04-24-2008

Phone 432-687-7375

OIL CONSERVATION DIVISION

Approved by

Chris Williams

Title

OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date

Expiration Date

Conditions of Approval Attached ☐

APR 29 2008

VGSAU No. 43
API No. 30-025-02247
Vacuum (Grayburg-San Andres) Field
Lea County, NM

Workover Procedure

1. MIRU Reverse Unit. Kill well. MIRU Pulling unit. ND WH. NU BOP.
2. MIRU spooler. TOH w/ 2-3/8" production tubing and ESP.
3. MI 2-7/8" work string. TIH w/ 4-3/4" mill tooth bit and 6 3-1/2" drill collars on 2-7/8" workstring.
4. Rig up reverse unit and power swivel.
5. Run to bottom and clean out fill to 4710'. Circulate hole clean. Continue drilling to 4715' to ensure that any downhole metal has been removed. If drilling metal is difficult then GIH w/ mill, otherwise if drilling with MT bit is smooth, then continue drilling until bit wear is apparent, then TOH.
6. TIH w/ 4-3/4" button bit and 10 3-1/2" drill collars on 2-7/8" workstring.
7. Drill new open hole section to 4850'. Circulate hole clean. TOH.
8. Rig up logging truck. Pull GR-CNL-CCL log from 4850' to 2850'. Correct depth to be on depth with Dresser-Atlas GR-Neutron log dated 4/17/72.
9. TIH w/ SN on 2-7/8" workstring to 4850'.
10. Drop Vortech pulsating sub in seating nipple.
11. RU Halliburton to acidize open hole interval from 4710' to 4850' w/ 4,000 gallons 15% HCl in 1 stage. Obtain pulsating sub treating depths from Technical Team. TOH.
12. TIH w/ 5-1/2" treating packer on 2-7/8" workstring and set at 4031'. Perform scale squeeze. TOH.
13. MIRU spooler. TIH w/ ESP on 2-3/8" production tubing. ND BOP. NU wellhead.
14. Return well to production.

BAS 4/17/08

VGSAU #43 Wellbore Diagram

Created: 04/17/06 By: C. A. Irie
 Updated: 04/14/08 By: BSPT
 Lease: Vacuum Grayburg San Andres Unit
 Field: Vacuum Grayburg San Andres Unit
 Surf. Loc.: 1,980' FNL & 484' FEL
 Bot. Loc.:
 County: Lea St.: NM
 Status: Active Oil Well

Well #: 43 St. Lse: B-1733
 API: 30-025-02247
 Unit Ltr.: H Section: 1
 TSHP/Rng: S-18 E-34
 Unit Ltr.: Section:
 TSHP/Rng:
 Directions: Buckeye, NM
 CHEVNO: FA3408

Surface Casing

Size: 8 5/8"
 Wt., Grd.: 28#
 Depth: 1,486
 Sxs Cmt: 300
 Circulate: Yes
 TOC: Surface
 Hole Size: 10"

Production Casing

Size: 5 1/2"
 Wt., Grd.: 14# EW
 Depth: 4,090
 Sxs Cmt: 200
 Circulate: No
 TOC: 2,800?
 Hole Size: 6 3/4"

Open Hole

Depth: 4,710'
 Hole Size: 4 3/4"

Under-Beam

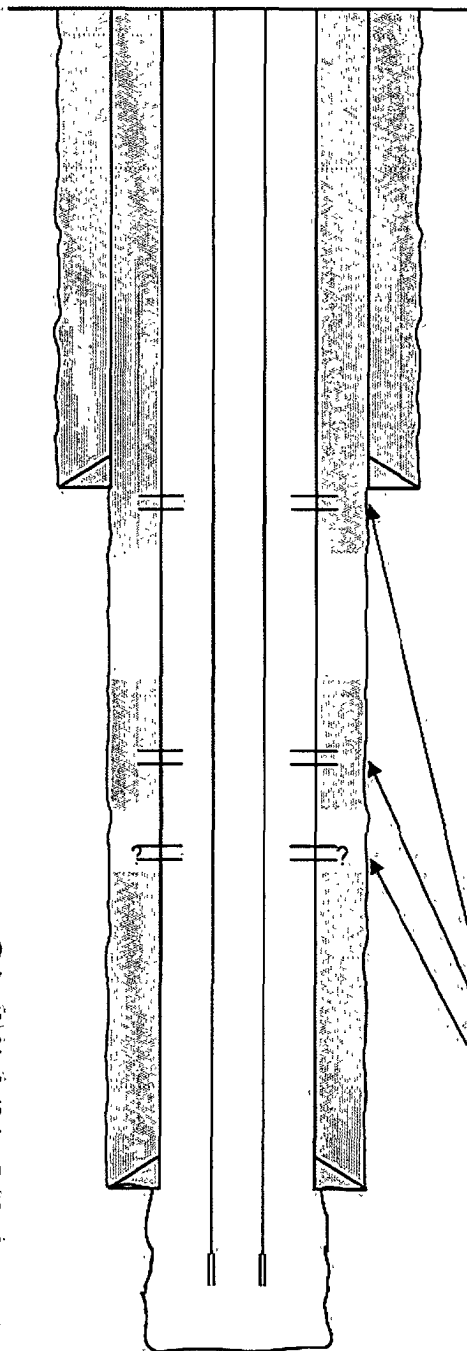
Top: 4,100
 Bottom: 4,710
 Hole Size: 6 1/4"

Equipment - Bottoms

Tubing Hanger 10
 2 3/8" J-55 4.7# Tbg 4,517
 Drain Valve 4,518
 2 3/8" J-55 4.7# Tbg 4,522
 Check Valve 4,523
 2 3/8" J-55 4.7# Tbg 4,526
 ESP Pump 4,547
 ESP Gas Sep. 4,550
 ESP Seal 4,556
 ESP Motor 4,578

Geology - Tops

Grayburg Marker 4,107
 Grayburg Dolomite 4,221
 Grayburg Dol. (Bottom) 4,264
 Upper San Andres 4,294
 Lower San Andres 4,458



KB: 3992'
 DF: 3992'
 GL: 3981'
 Ini. Spud: 09/30/39
 Ini. Comp.: 11/04/39

History

12/27/71 Acid OH: 1000 gls 15% HCL
 4/19/72 Stim: Spot 6 bbl Xylene, acid OH 3000 gls 15% NEA (80%) and Xylene (20%).
 4/2/74 Repair Wtr Flow: Perf 4 spf 2806-10, unable to pump, perf 4 spf 2460-64, cmt 4 bpm, no return, sqz 400 sx, had partial returns and lost circ. later in job
 1/14/86 Under-ream: 6 1/4" 4100-4710, spot 750 gls 15% NEFE, acid 12000 gls 15% NEFE, +RS 496o 35w GOR 322
 4/29/88 Repair Wtr Flow: Perf 1505:1 spf, pmp 400 sx circ, acid OH 2000 gls 20% HCL
 6/24/92 Acid: 3000 gls 15% HCL NEFE 3000#, ammonia bicarb, RS, SIS, 259o 107w 145g
 7/31/95 Acid: 15500 gls 15% NEFE HCL, ScSq, 292o 196w 75g
 12/15/99 Under-ream & Stim: Tag 4700, UR 4256-4659, acid OH 6000 gls 15% NEFE+RS, sub 4559, ScSq, 234o 981w 39g
 6/12/06 Acidize: pump 10,000 gals 15% and 5000# RS, CO RS to TD @ 4710'

Perf 1 spf @ 1505, sqz 400 bbls
 Perf 2 spf @ 2460-64', sqz 400 sx
 Perf 4 spf @ 2806-10, no sqz

6 1/4" Under-Beam 4100'-4710'

PBTD: 4710'
 TD: 4710'

Chevron U.S.A. Inc. Wellbore Diagram : VGSAU 043

