

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

Submit to appropriate District Of

MAR 19 2008

☐ AMENDED REPC

HOBBS OCD

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 30-025-02251
³ Property Code 30022	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	⁶ Well No 56
⁹ Proposed Pool 1 VACUUM GRAYBURG SAN ANDRES		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no C	Section 1	Township 18-S	Range 34-E	Lot Idn	Feet from the 671	North/South line NORTH	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 O	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3993'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4850'	¹⁸ Formation VACUUM S/A	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
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 DEPEN THE SUBJECT WELL INTO THE SANANDRES TRANSITION ZONE, ACIDIZE & RETURN TO PRODUCTION THIS WORK IS IN PREPARATION FOR THE UPCOMING VGSAU PHASE 1C02 EXPANSION WHICH WILL RESULT IN CO2 INJECTION INTO SAN ANDRES MAIN PAY & TZ LATER THIS YEAR

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

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:

Denise Pinkerton

Printed name: DENISE PINKERTON

Title REGULATORY SPECIALIST

E-mail Address. leakejd@chevron.com

Date 03-18-2008

Phone 432-687-7375

OIL CONSERVATION DIVISION

Approved by

Chris Williams

Title: OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date

Expiration Date

MAR 24 2008

Conditions of Approval Attached ☐

VGSAU No. 56
API No. 30-025-02251
Vacuum (Grayburg-San Andres) Field
Lea County, NM

Workover Procedure

1. Rig up pulling unit. Kill well. ND wellhead. NU BOP.
2. Release packer and TOH w/ 2-3/8" production tubing.
3. TOH w/ 4-3/4" mill tooth bit and 6 3-1/2" drill collars on 2-3/8" workstring.
4. Tag fill. Rig up reverse unit and clean out to 4710' if necessary. Circulate hole clean and TOH.
5. TIH w/ 4-3/4" button bit and 6 3-1/2" drill collars on 2-3/8" workstring. Drill new open hole section from 4710' to 4850'. Circulate hole clean and TOH.
6. Rig up loggers. Get on depth with Schlumberger GR-CNL log dated 1/6/79. Pull GR-CNL log from 4850' to 2850'.
7. TIH w/ 2-3/8" workstring and SN to 4850'. Drop Vortech pulsating sub and land in SN. Acidize* the new open hole interval w/ 2,000 gallons 15% HCl at locations directed by Technical Team. TOH.
8. TIH w/ 5-1/2" treating packer on 2-3/8" workstring and set at 3850'. Acidize* open hole interval 3968'-4850' w/ 6,000 gallons 15% HCl in four stages. Drop 1500# rock salt between stages for diversion.
9. Shut-in for two hours and flow back load.
10. Pump scale inhibitor. Shut-in over night.
11. RIH w/ swab and test. Determine whether to return to flowing or to run artificial lift equipment.

* The subject well has had a history of downhole asphaltene problems. The acid should contain mutual solvent additives to minimize the formation of an emulsion and to allow for the penetration of the acid through an oil wet interface.

PTB 3/11/08

VGSAU #56 Wellbore Diagram

Created: 03/28/06 By: C. A. Irle
 Updated: 03/05/08 By: PTBP
 Lease: Vacuum Grayburg San Andres Unit
 Field: Vacuum Grayburg San Andres Unit
 Surf. Loc.: 671' FNL & 1,980' FWL
 Bot. Loc.:
 County: Lea St.: NM
 Status: Active Oil Well

Well #: 56 St. Lse: 857948
 API: 30-025-02251
 Unit Ltr.: C Section: 1
 TSHP/Rng: S-18 E-34
 Unit Ltr.: Section:
 TSHP/Rng:
 Directions: Buckeye, NM
 CHEVNO: FA3412

Surface Casing

Size: 7 5/8"
 Wt., Grd.: 26.4# LW
 Depth: 1,521'
 Sxs Cmt: 300
 Circulate: Yes
 TOC: Surface
 Hole Size: 9 5/8"

Production Casing

Size: 5 1/2"
 Wt., Grd.: 17# SMLS
 Depth: 3968'
 Sxs Cmt: 200
 Circulate: No
 TOC: 2068' calc @ 60% Effy
 Hole Size: 6 3/4"

Open Hole

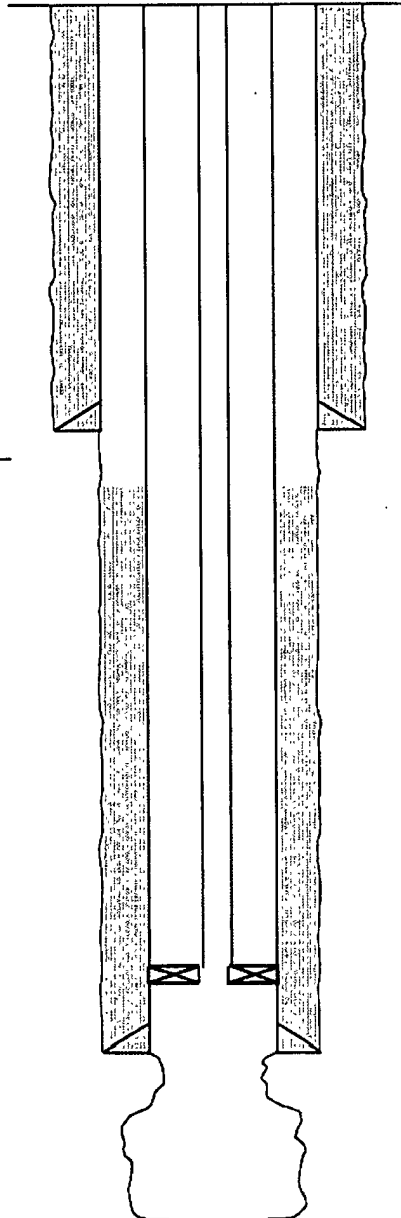
Depth: 4,710'
 Hole Size: 4 3/4"

Under-Ream

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

Tubing

Size: 2 3/8"
 Depth: 3853'



KB:

DF: 4,004

GL: 3,993

Ini. Spud: 03/17/40

Ini. Comp.: 04/21/40

History

4/21/40 Ini Comp:

10/17/72 Acid OH: 1000 gals 15% NEA, 910
 4w GOR 1970

2/9/79 Frac: CO OH 4710, pkr 4375, acid
 6000 gls 15% HCl, Frac OH 30000 gls
 42000# 20/40 snd.

86-90, 15 Failures

91: 2 failures

92: 4 failures

3/93 Rod Pump Failure

6/22/93 Under-ream & Acid: Tag 4710,
 under-ream 4100-4710, pkr 3200, acid 6000
 gls 15% HCl. ScSq 600 892w 40g

7/15/97 Frac: Tag 4690, snd 4523 (LSA
 4454), pkr 3891, Frac OH 28000 gls 40# XL
 78000# 16/30 resin coated snd, screen out,
 CO tbg 3300-4024, CO snd and fiberglass
 4550. 350 1119w 34g

8/6/97 DHS Lightning: Pump worn out due
 to sand. Run Stanley Filters.

5/2/00 Upgrade Sub.

6/16/00 DHS: Improper inst ESP, CO 4710.

6/12/01 DHS: Cor & scale.

4/6/03 New Satellite: CO2.

12/16/03 Stim: Last 4 jts asphalthenes, no
 fill, 1500 gls xylene SON, swab, acid 6000
 gls 15% HCl 4000# RS, SIS.

11/22/04 DHS Asphalthenes: Last 44 jts,
 Xylene soak over Thanksgiving.

5-1/2" Packer w/ On-Off tool set @ 3853'

PBTD: 4,710

TD: 4,710

Chevron U.S.A. Inc. Wellbore Diagram : VGSAU 056

