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

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APR 24 2008
HOBBS OCD

Form C-101
May 27, 2

Submit to appropriate District Of

☐ AMENDED REPC

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

[1] Operator Name and Address	[2] OGRID Number
CHEVRON U S A INC. 15 SMITH ROAD MIDLAND, TEXAS 79705	4323
	[3] API Number 30 – 025-02249

[3] Property Code	[5] Property Name	[6] Well No
30022	VACUUM GRAYBURG SAN ANDRES UNIT	41

[9] Proposed Pool 1	[10] Proposed Pool 2
VACUUM GRAYBURG SAN ANDRES	

[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
F	1	17-S	34-E		1980	NORTH	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	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
D	OIL		S	4003'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
NO	4850'	GRAYBURG S/A		

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water

Pit Liner Synthetic ☐ _____mils thick Clay ☐ Pit Volume _____bbls
Closed-Loop System ☐

Drilling Method
Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

[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 zo
Describe the blowout prevention program, if any Use additional sheets if necessary

CHEVRON U S A INC INTENDS TO DEEPEN THE SUBJECT WELL INTO THESAN ANDRES TRANSITION ZONE AND RETURN TO PRODUCTION
DEEPENING WILL REQUIRE FISHING OUT A STUCK SUBMERSIBLE PUMP. IF FISHING IS NOT SUCCESSFUL, A CEMENT PLUG WILL BE SPOTTEI
THE WELL WILL BE SIDETRACKED AROUND THE FISH & DEEPENED TO 4850

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 Denise Pinkerton

Printed name DENISE PINKERTON

Title. REGULATORY SPECIALIST

E-mail Address leakejd@chevron com

Date 04-23-2008 Phone 432-687-7375

OIL CONSERVATION DIVISION

Approved by

Title PETROLEUM ENGINEER

Approval Date APR 25 2008 Expiration Date:

Conditions of Approval Attached ☐

VGSAU 41

Vacuum (Grayburg San Andres) Field, Lea County NM
API No. 30-025--02249
Procedure to: C/O, Deepen & Stim Stim T-Z

1 MU RU PU & RU. Kill well if necessary. .
2 ND WH. NU BOP. POH w/ prod tbg & ESP.
3 PU GIH w/ 6 1/8" bit & DC on 2 7/8" WS to top of 5 1/2" liner at 4003'. POOH.
4 PU GIH w/ 4 3/4" bit, 4 3/4" string mill & DC on 2 7/8" WS to top of ESP motor @ 4545'. Note tight spot in 5 1/2" at 4009'.
5 PU & GIH w/ 4 3/4" RBP & Pkr on 2 7/8" N-80 WS. Set RBP @ ~4250'. Pull 1 jt and set pkr test RBP to 500 PSI. Test backside to 500 psi. If a leak is detected isolate w/ RBP & pkr. Obtain Pump-in rate and Pressure for use in possible sqz. Contact Remedial Engineer for procedure. POH w/ RBP & Pkr. Note: there are 3 sets of sqz holes @ 1565', 1400' sqzd in 1982 & 4161-4256' sqzd in 1999.
6 Well will dictate where we go from here. Previous operations showed to have tried to washover pump w/ 4 3/4" X 4" ID shoe but had trouble getting into top of liner at 4009'. Top of liner was milled on and fish pushed to 4545'. Liner needs to be near gauge to attempt to fish remains of ESP motor. Flat bottom mill &/or tapered mill may need to be run in order to get to the TOF.

7 Once fish is recovered. GIH w/ 4 3/4" bit, DC on 2 7/8" WS and deeped well to 4850.
8 If fish is not recovered in reasonable time frame, GIH w/ 2 7/8" tbg OE to top of fish. Spot Cmt plug on top of fish consisting of Class H cmt mixed at 17#/gal.(very dense hard cmt) POH with tbg to bottom of liner rvs circ exess cmt from liner. WOC.
9 PU & GIH w/ 4 3/4" MT bit 1 joint 2 3/8" tbg 3 1/8" DC's on 2 7/8" WS. Start drlg out cmt, hopefully bit will walk off cmt and into formation. If cement is green WOC . Once bit is out and returns are all formation, POH w/ MT bit PU button bit with DC's GIH and deepen well to new TD of 4850.
10 MIRU Baker Atlas for logging job, log GR-CNL from new TD to 3850' (logging min.) Tie into Schlumberger GR-CNL-CCL Log dated 4/25/1999. Send logs into Office.
11 TIH w/ 5 1/2" treating packer on 2-7/8" workstring and set at ~4075'.
12 MI RU Halliburton to acidize the San Andres open-hole interval with 4,000 gallons 15% HCL in 3 equal stages. Precede acid with 2000# rock salt block. Drop 1500-2000# rock salt between stages mixed in GBW. Rate 5-6 BPM Max press 5000 psi. SI 2 hrs. Flowback to tank to recover load.
13 Kill well with 10 ppg BW if nec. Rlse Pkr & POOH with WS and PKR.
14 TIH w/ notched collar and circ out rock salt to TD of 4850'. TOH w/ WS and Notched collar.

15 GIH w/ Pkr on WS set pkr @ ~4075'. Sqz Open-hole interval w/ scale inhibitor per Baker Petrolite recommendation. SI over night. POH w/ WS & Pkr LD.
16 RIH with Production equipment as per ALCR-Bobby Hill. Hang well on.
17 Clean location. RDMO PU & RU.
18 Turn well over to production department.

LGB 4/15/08
Modified by PTB 4/16/08

VGSAU #41 Wellbore Diagram

Created:	09/09/02	By:	MCD	Well #:	41	St. Lse:	
Updated:	12/17/07	By:	BSPT	API	30-025-02249		
Lease:	Vacuum Grayburg San Andres Unit			Unit Ltr.:	F	Section:	1
Field:	Vacuum Grayburg San Andres Unit			TSHP/Rng:	17S-34E		
Surf. Loc.:	1980' FNL & 1980' FWL			Unit Ltr.:		Section:	
Bot. Loc.:				TSHP/Rng:			
County:	Lea	St.:	NM	Directions:	Buckeye, NM		
Status:	Active Oil Well			Chevno:	FA3410		

Surface Casing (Not Shown)

Size:	13"
Wt., Grd.:	40#
Depth:	260
Sxs Cmt:	250
Circulate:	Yes
TOC:	Surface
Hole Size:	17"

Intermediate Casing

Size:	9 5/8"
Wt., Grd.:	40#
Depth:	1554'
Sxs Cmt:	350
Circulate:	No
TOC:	669'
Hole Size:	12 1/4"

Production Casing

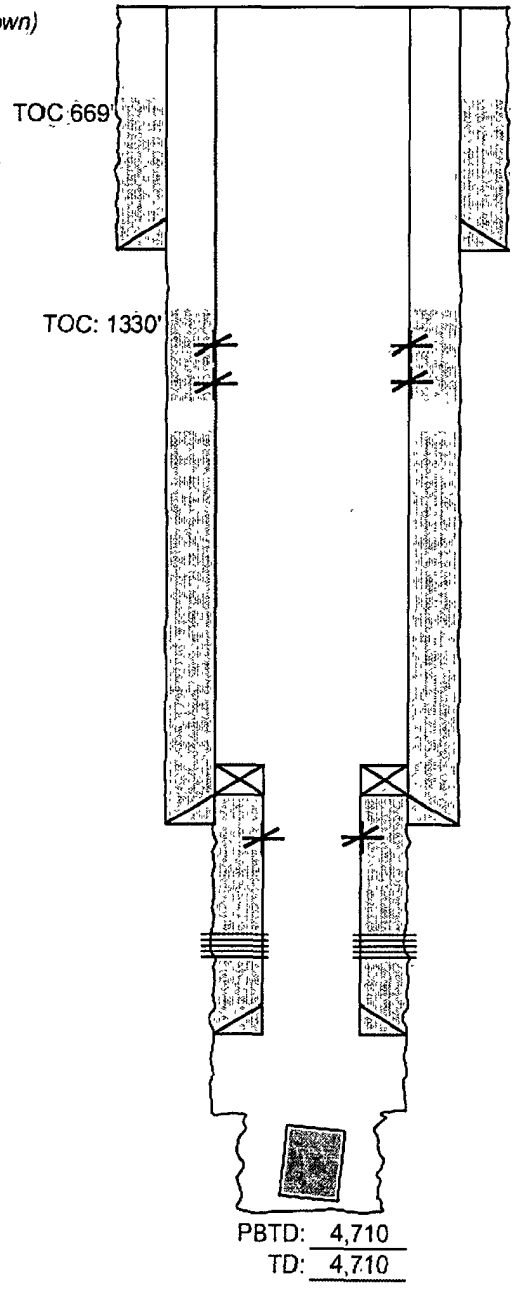
Size:	7"
Wt., Grd.:	24#
Depth:	4100'
Sxs Cmt:	250
Circulate:	No
TOC:	1330', TS
Hole Size:	8 5/8"

Liner

Size:	5 1/2"
Wt., Grd.:	17#
Depth:	4003'
Bottom:	4445'
Sxs Cmt:	175
Hole Size:	6 1/4"

Open Hole

Size:	6 1/4"
Depth:	4445'-4550'
Size:	4 1/2"
Depth:	4550'-4710'



KB:	4013'
DF:	N/A
GL:	4003'
Ini. Spud:	12/04/37
Ini. Comp.:	01/16/38

History

1/38 Initial Completion

12/71 Frac: Frac OH 4100'-4550' w/ 30000 gal gelled brine & 45,000# sand

3/72 Liner & Deepen: Ran 5 1/2" liner, set @ 4445', Csg hanger set @ 4003'. Cmt down tbg w/ 25 sx, Set cmt rtnr & squeeze w/ 150 sx, Test liner to 1000#. OK. Drill to 4710' w/ 4 1/2" bit.

8/73 Frac: Frac OH 4445-4710 w/ 30000 gal emulsifrac in 3 eq. stages

5/82 Sqz: Water Flow up int. csg @ 1400', Perf 7" @ 1565', set cmt rtnr, squeeze w/ 425 sx, still had flow, Perf @ 1400', squeeze w/ 75 sx. Test held.

12/94 Acidize: Acidize OH 4445'-4710' w/ 6600 gal 15% NEFE & 4000# RS

5/99 Sqz, Perf & Acidize: Find csg leak 4161'-4256' w/ camera, set CIBP, set cmt rtnr, sqz 168 sx into form, Test OK, Perf 4 jspf 4304-24, 30-40, 47-55, 4375-4400, 14-24, Acidize w/ 4000 gal 15% NEFE & 2500# RS, D/O cmt rtnr & CIBP to 4541' & hit old sub?

9/02 Acidize: C/O to 4545' PBTD. Acidize 4304'-4424' w/ 4000 gal DAD. SIS.

11/04 Attempt to Fish Motor: Stuck pmp, came loose. **Motor & seals left in hole.** Work on tight spot @ 4009'. Use washpipe, shoe, tapered mill, shoe, flat-bottom mill, & tapered mill. Pump 1000 gal acid. Push to 4545' (top of motor). Mill on liner f/ 4003'-4445'.

Chevron U.S.A. Inc. Wellbore Diagram : VGSAU 041