

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-  
May 27, 2

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

Submit to appropriate District Of

☐ AMENDED REPC

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

<sup>1</sup> Operator Name and Address CHEVRON U S A INC. 15 SMITH ROAD MIDLAND, TEXAS 79705		<sup>2</sup> OGRID Number 4323
		<sup>3</sup> API Number 30 - 025-02245
<sup>3</sup> Property Code 30022	<sup>5</sup> Property Name VACUUM GRAYBURG SAN ANDRES UNIT	
<sup>9</sup> Proposed Pool 1 -VACUUM GRAYBURG SAN ANDRES		<sup>6</sup> Well No 42
<sup>9</sup> Proposed Pool 1		<sup>10</sup> Proposed Pool 2

**7 Surface Location**

UL or lot no G	Section 1	Township 18-S	Range 34-E	Lot Idn	Feet from the 230 1980	North/South line NORTH	Feet from the 230 1980	East/West line EAST	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**

<sup>11</sup> Work Type Code D Deepen	<sup>12</sup> Well Type Code OIL	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 4007'
<sup>16</sup> Multiple NO	<sup>17</sup> Proposed Depth 4850'	<sup>18</sup> Formation GRAYBURG S/A	<sup>19</sup> Contractor	<sup>20</sup> Spud Date
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit Liner Synthetic <input type="checkbox"/> _____mils thick Closed-Loop System <input type="checkbox"/>		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"/>

**21 Proposed Casing and Cement Program**

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

<sup>22</sup> 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 47354850, ACIDIZE AND RETURN TO PRODUCTION.

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

**RECEIVED**

MAR 04 2008

**HOBBS OCD**

**Permit Expires 2 Years From Approval  
Date Unless Drilling Underway  
Deepen**

<sup>23</sup> 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 <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Signature Denise Pinkerton		Approved by Chris Williams	
Printed name DENISE PINKERTON		Title OC DISTRICT SUPERVISOR/GENERAL MANAGER	
Title REGULATORY SPECIALIST		Approval Date MAR 06 2008	
E-mail Address leakejd@chevron.com		Expiration Date	
Date. 03-03-2008	Phone 432-687-7375	Conditions of Approval Attached <input type="checkbox"/>	

VGSAU No. 42  
API No. 30-025-02245  
Vacuum (Grayburg-San Andres) Field  
Lea County, NM

Workover Procedure

1. Rig up pulling unit. Kill well. ND wellhead. NU BOP.
2. TOH w/ 2-7/8" production tubing and ESP.
3. TIH w/ 6-1/8" 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 4735'. Circulate hole clean. Continue drilling to 4740' to insure that any downhole metal has been removed. TOH.
6. TIH w/ 6-1/8" button bit and 6 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-SWN log dated 5/4/72.
9. TIH w/ SN on 2-7/8" workstring to 4850'.
10. Drop Vortech pulsating sub in seating nipple.
11. Acidize open hole interval from 4735' to 4850' w/ 4,000 gallons 15% HCl. Obtain pulsating sub treating depths from Technical Team. TOH.
12. TIH w/ 7" treating packer on 2-7/8" workstring and set at 4075'. Perform scale squeeze. TOH.
13. TIH w/ ESP on 2-7/8" production tubing. ND BOP. NU wellhead.
14. Return well to production.

PTB 2/29/08

# VGSAU #42 Wellbore Diagram

Created: 07/07/03 By: SMG  
 Updated: 12/17/07 By: BSPT  
 Lease: Vacuum Grayburg San Andres Unit  
 Field: Vacuum Grayburg San Andres Unit  
 Surf. Loc.: 330' FNL & 330' FEL  
 Bot. Loc.:  
 County: Lea St.: NM  
 Status: Active Oil Well

Well #: 42 St. Lse:  
 API: 30-025-02245  
 Unit Ltr.: G Section: 1  
 TSHP/Rng: S-18 E-34  
 Unit Ltr.: Section:  
 TSHP/Rng:  
 Directions: Buckeye, NM  
 Chevno: FA3406

## Surface Casing

Size: 13 3/8"  
 Wt., Grd.: 40#, LW  
 Depth: 301'  
 Sxs Cmt: 275  
 Circulate: Yes  
 TOC: Surface  
 Hole Size: 17 1/2"

## Intermediate Casing

Size: 9 5/8"  
 Wt., Grd.: 40#, SMLS  
 Depth: 1544'  
 Sxs Cmt: 350  
 Circulate: No  
 TOC: 660' (calc @ 60% eff.)  
 Hole Size: 12 1/4"

## Production Casing

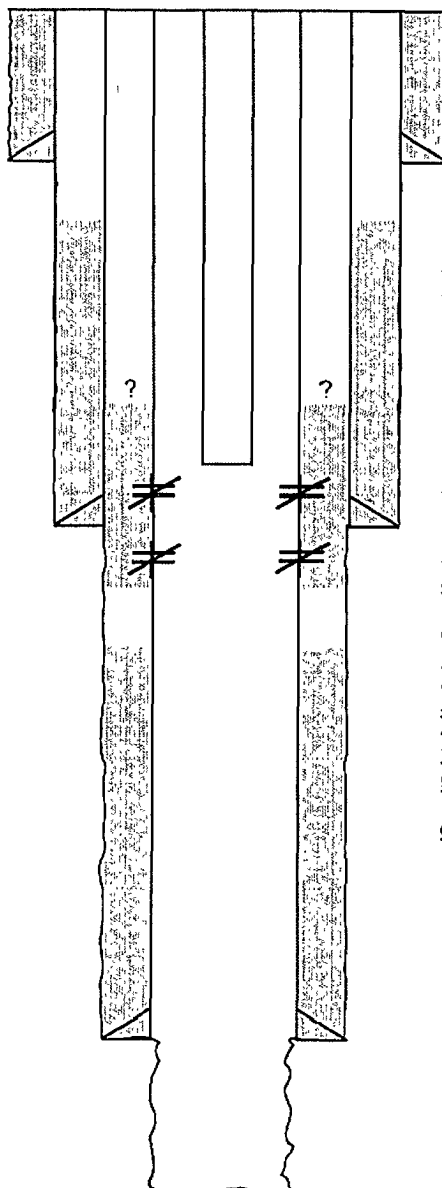
Size: 7"  
 Wt., Grd.: 24#, SMLS  
 Depth: 4128'  
 Sxs Cmt: 250  
 Circulate: No  
 TOC: 2700' (calc @ 60% eff.)  
 Hole Size: 8 5/8"

## Open Hole

Depth: 4,735'  
 Hole Size: 6 1/4"

## Tubing

2 7/8" J-55 3,690' 131 jts.



KB: 4002'  
 DF: 3998'  
 GL: 4007'  
 Ini. Spud: 9/17/1937  
 Ini. Comp.: 11/22/1937

## History

11/37 Initial Completion: Natural OH?  
 5/72 Deepen: Deepen w/ bit to 4690'  
 11/72 Frac: Set OH pkr @ 4343. Frac 4343'  
 4690'. 3 stages w/ 500 gal acid, 3000 gal  
 gelled oil, & 3000 gal gelled oil w/ 1ppg  
 20/40 sand per stage.  
 11/80 Sqz - Isolate Salt Zone: Perf 2 js @  
 1569' & sqz 9 5/8" X 7" ann w/ 475 sx cmt  
 Perf 2 js @ 1385', D/O to 1590, sqz w/ 75  
 sx, 7" held 800#  
 2/83 Acidize: Acidize OH w/ 4000 gal 15%  
 NEFE, 1000# RS, & 500# BA flakes, Re-  
 acidize w/ 2000 gal 15% NEFE, 1000# RS,  
 & 500# BA flakes  
 4/86 Deepen & Acidize: Deepen to 4735'  
 (current TD), Spot converter, pump 10000  
 gal 15% NEFE w/ 7900# RS  
 1/96 Acidize: Pump 14000 gal 15% NEFE  
 acid in 3 stages w/ 8000# RS. SIS.  
 8/97 Frac: Drop sand & Calseal in OH to  
 4380'. SIS. Frac 4128'-4380' w/ 20000 gal  
 XL gel & 59220# 16/30 RC sand  
 9/01 Acidize: Acidize entire OH w/ 8000 gal  
 15% NEFE in 3 stages w/ 4000# RS  
 6/03 Acidize: Acidize entire OH w/ 8000 gal  
 15% DAD w/ 4000# RS. SIS.

PBTD: 4,735  
 TD: 4,735

# Chevron U.S.A. Inc. Wellbore Diagram : VGSAU 042

