

## 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 ResourcesForm 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

JAN 23 2008

<sup>1</sup> Operator Name and Address CHEVRON U S A INC. 15 SMITH ROAD MIDLAND, TEXAS 79705		<sup>2</sup> OGB Number 30-025-02263
<sup>3</sup> Property Code 30022	<sup>5</sup> Property Name VACUUM GRAYBURG SAN ANDRES UNIT	<sup>6</sup> Well No 54
<sup>9</sup> Proposed Pool 1 VACUUM GRAYBURG SAN ANDRES		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no A	Section 2	Township 18-S	Range 34-E	Lot Idn	Feet from the 675	North/South line NORTH	Feet from the 660	East/West line EAST	County LEA
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<sup>8</sup> 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	<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 4002'
<sup>16</sup> Multiple NO	<sup>17</sup> Proposed Depth 4850'	<sup>18</sup> Formation SAN ANDRES	<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"/> _____ mls thick Clay <input type="checkbox"/> Pit Volume _____ bbls Closed-Loop System <input type="checkbox"/>		Drilling Method Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>		

<sup>21</sup> 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 TO THE SAN ANDRES TRANSITION ZONE. THE SUBJECT WELL IS LOCATED IN THE VGSAU CO2 PROJECT PHASE 1 AREA THE PLANS FOR THIS PROJECT ARE TO COMMENCE CO2 INJECTION INTO THE MAIN PAY & TRANSITION ZONE LATER IN 2008 DEEPENING THE SUBJECT WELL TO THE TRANSITION ZONE WILL BE ALLIED WITH THE OVERALL PLAN FOR THE CO2 PROJECT AREA.

THE INTENDED PROCEDURE AND WELLBORE DIAGRAM IS ATTACHED FOR YOUR APPROVAL

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

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 ☐, 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 01-22-2008

Phone 432-687-7375

## OIL CONSERVATION DIVISION

Approved by

Chris Williams

Title: OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date

Expiration Date

JAN 24 2008

Conditions of Approval Attached ☐

VGSAU No. 54  
API No. 30-025-02263  
Vacuum (Grayburg-San Andres) Field  
Lea County, NM

Workover Procedure

1. Rig up pulling unit. ND wellhead.
2. POH w/ with rods and pump. NU BOP. TOH w/ tubing.
3. 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. Commence drilling operations. TOH w/ mill tooth bit after starting to drill formation.
6. TIH w/ 4-3/4" button bit and 6, 3-1/2" drill collars on 2-7/8" workstring. Drill new open hole from 4710' to 4850'. Circulate hole clean and TOH.
7. TIH w/ 2-7/8" workstring w/ SN to 4850'.
8. Drop Vortech pulsation tool and land in SN.
9. Acidize new open hole 4710' to 4850' w/ 2,000 gallons 15% NEFE in four equal stages with the EOT @ 4850', 4800', 4750', and 4710'. TOH
10. TIH w/ 5-1/2" packer on 2-7/8" workstring and set @ 4000'.
11. Acidize the open hole interval 4091'-4850' w/ 6,000 gallons 15% NEFE HCl in three stages w/ 1500# graded rock salt between stages. Leave shut-in for one hour, open up well and flow back load. Release packer and TOH.
12. TIH w/ 4-3/4" bit on 2-7/8" workstring and clean out rock salt to 4850'. TOH.
13. TIH w/ production tubing. ND BOP.
14. Run pump and rods. NU wellhead.
15. Return well to production and test.

# VGSAU #54 Wellbore Diagram

Created: 11/05/03 By: SMG  
 Updated: 12/12/07 By: BSPT  
 Lease: Vacuum Grayburg San Andres Unit  
 Field: Vacuum Grayburg San Andres Unit  
 Surf. Loc.: 675' FNL & 660' FEL  
 Bot. Loc.: \_\_\_\_\_  
 County: Lea St.: NM  
 Status: Active Oil Well

Well #: 54 St. Lse: \_\_\_\_\_  
 API: 30-025-02263  
 Unit Ltr.: A Section: 2  
 TSHP/Rng: 18S-34E  
 Unit Ltr.: \_\_\_\_\_ Section: \_\_\_\_\_  
 TSHP/Rng: \_\_\_\_\_  
 Directions: Buckeye, NM  
 CHEVNO: FA3424

## Surface Casing

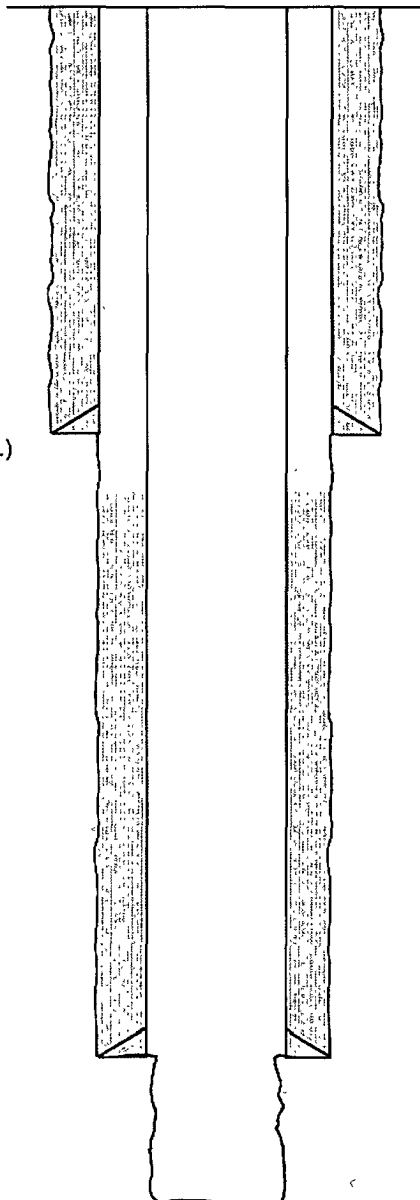
Size: 7 5/8"  
 Wt., Grd.: 26.4#, LW  
 Depth: 1554'  
 Sxs Cmt: 300 sxs  
 Circulate: Yes  
 TOC: Surface  
 Hole Size: 9 5/8"

## Production Casing

Size: 5 1/2"  
 Wt., Grd.: 17#, SMLS  
 Depth: 4091'  
 Sxs Cmt: 200 sxs  
 Circulate: No  
 TOC: 1880' (calc @ 70% effy.)  
 Hole Size: 6 3/4"

## Open Hole

Depth: 4091'-4710'  
 Hole Size: 4 3/4"



KB: 4014'  
 DF: 4013'  
 GL: 4002'  
 Ini. Spud: 10/07/38  
 Ini. Comp.: 11/16/38

## History

11/38 Initial Completion: Natural OH  
7/72 Acidize: xylene 12bbls, Acidize 3000 gals w/ RS, 83o 5w GOR 1675  
8/77 Acidize: C/O, Acidize 4500 gals 15% NEFE  
5/79 Acidize: CO, Acidize 5000 gals 15% NEFE & RS,  
6/79 Frac: Frac 40000 gals XL & 44000# 20/40 & 10/20 sand  
11/83 Acidize: Acidize 8000 ga s XL 15% & RS  
1/91 Acidize: CO, Am bicarb, Acidize 1900 gals 15% ScSq Before: 4o 251w, After: 29o 449w  
1/94 Acidize: Am bicarb, Acidize 9000 gals. 15% NEFE & RS, ScSq  
1/93-1/07: 18 Rod/Tubing Failures

PBTD: 4,710  
 TD: 4,710