

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

RECEIVED

JUN 04 2008

☐ AMENDED REPC

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

HOBBS OCD

¹ Operator Name and Address CHEVRON U S A INC 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRID Number 4323
		³ API Number 30 - 025-24365
³ Property Code 30022	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	⁶ Well No. 47
⁹ Proposed Pool 1 VACUUM GRAYBURG SAN ANDRES		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no H	Section 2	Township 18-S	Range 34-E	Lot Idn	Feet from the 1330	North/South line NORTH	Feet from the 10	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

¹¹ Work Type Code D	¹² Well Type Code INJECTOR	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4003'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4840'	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 <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 DEEPEN THE SUBJECT WELL INTO THE SAN ANDRES TRANSITION ZONE FROM 4788-4840. THE WELL IS CURRENTLY A SAN ANDRES MAIN PAY CASED COMPLETION. INJECTING 550 BHPD THE NEW PERFS & OPEN HOLE SECTION WILL BE 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:

Denise Pinkerton

Printed name DENISE PINKERTON

Title REGULATORY SPECIALIST

E-mail Address leakejd@chevron.com

Date 06-02-2008

Phone 432-687-7375

OIL CONSERVATION DIVISION

Approved by

[Signature]

Title: PETROLEUM ENGINEER

Approval Date JUN 11 2008

Expiration Date

Conditions of Approval Attached ☐

VGSAU 47
API No. 30-025-24365
Vacuum (Grayburg San Andres) Field
Lea County, NM

Procedure to: Remediate Casing, Deepen, Perforate and Stim

Note: Subject well failed an MIT test on 10-5-07. WO in August 2004 found and squeezed holes from 377 to 439'.

1. MIRU PU & RU. Pump 25 bbls 10# BW down tbg, take SI pressure and calculate kill weight fluid. Kill well as nec. ND WH. NU BOP & Envirovac.
2. Unset pkr & POOH w/ tbg & pkr. Truck off Duoline tbg.
3. MI Baker Atlas to run MicroVertilog from 4230' to surface.
4. TIH w/ 4 1/2" RBP and set @ ~30 ft. Test csg to 500#. ND BOP. Replace Larkin WH w/ slip-type WH. Test WH. NU BOP. GIH, latch onto RBP and TOH.
5. Consult with Technical Team about casing remediation.
6. After successfully testing the casing, TIH w/ 3 7/8" MT bit, 6 - 3 1/8" DC on 2 3/8" WS. D/O fill & cmt to new PBTD of 4840'. Circ clean with 10# BW. POOH w/ WS, DCs & bit.
NOTE: The latest maximum depth recorded with a drill bit was +/- 4784' in September 2004. Fill was tagged at 4764' in July 2005. Getting to PBTD will require drilling out the float shoe. If casing is collapsed, POOH w/bit and GIH w/ 3 7/8" cone buster mill to C/O. If the casing still continues to "fall in" use a casing roller to swedge out the casing.
7. MI Baker Atlas to perforate the following intervals w/ 3 1/8" slick guns w/ 2 DP JSPF 120 phasing. Tie into The Western Company Gammatron Log dated 4/2/1973 for depth control. A short joint is located at 4239-4260. Perf intervals are:

4294-4298, 4312-4320, 4323-4328, 4354-4366, 4460-4470, 4482-4488, 4490-4496,
4556-4564, 4639-4648, 4664-4681, 4719-4724, 4740-4742, 4750-4756, 4760-4766,
4770-4780, 4785-4795
8. TIH w/ SN on 2 3/8" workstring to 4840'.
9. Drop Vortech pulsating sub in seating nipple.
10. RU Halliburton to acidize new perfs and open hole from 4294' to 4840' w/ 4,000 gallons 15% HCl. Obtain pulsating sub treating depths and volumes from Technical Team. TOH.
11. TIH w/ new Fiberline injection tbg & pkr w/ On-Off tool. Set pkr @ +/- 4204' w/ 10 pt compression. Space out. Release from On-Off tool, circ hole with 10 ppg pkr fluid. Latch back onto On-Off tool & land tbg hanger. ND BOP. NU WH. Run MIT for OCD.
12. Hookup injection lines. Clean location. RDMO PU & RU.
13. Turn well over to production department.
14. Run injection profile.

BAS 5/27/08

VGSAU #47 Wellbore Diagram

Created: 05/18/04 By: SMG
 Updated: 05/12/08 By: BSPT
 Lease: Vacuum Grayburg San Andres Unit
 Field: Vacuum Grayburg San Andres Unit
 Surf. Loc.: 1330' FNL & 10' FEL
 Bot. Loc.:
 County: Lea St.: NM
 Status: Active Injection Well

Well #: 47 St. Lse: 857948
 API: 30-025-24365
 Unit Ltr.: H Section: 2
 TSHP/Rng: S-18 E-34
 Unit Ltr.: Section:
 TSHP/Rng:
 Directions: Buckeye, NM
 Chevno: FH0890

Surface Casing

Size: 8 5/8"
 Wt., Grd.: 20#, K-55
 Depth: 355'
 Sxs Cmt: 300
 Circulate: Yes
 TOC: Surface
 Hole Size: 12 1/4"

Production Casing

Size: 4 1/2"
 Wt., Grd.: 9.5#, J-55
 Depth: 4800'
 Sxs Cmt: 600
 Circulate: No
 TOC: 2460', CBL
 Hole Size: 7 7/8"

Perforations

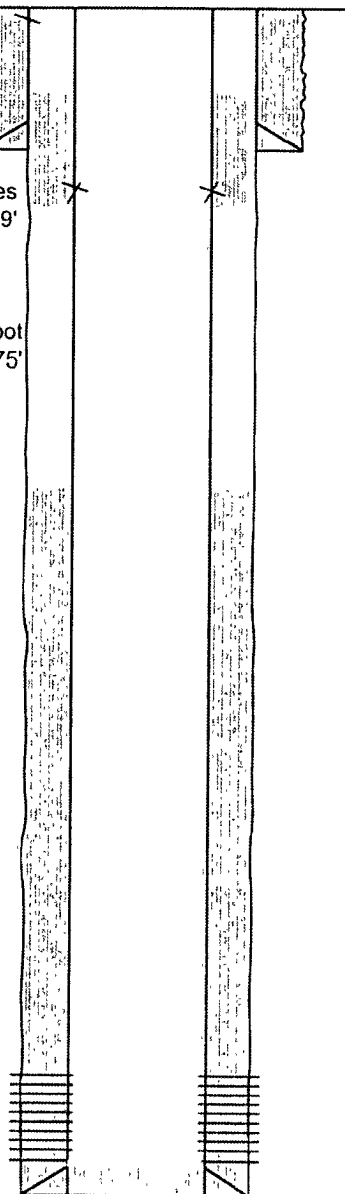
4360'-4739'

132 jts. 2 3/8" J-55 Duoline tbq

4 1/2" NP Loc-Set Pkr @ 4204'

Sqz holes
 f/ 377 - 439'

Tight Spot
 @ 1060-75'



KB:
 DF:
 GL: 4,003
 Ini. Spud: 03/24/73
 Ini. Comp: 04/04/73

History

4/73 Ini Comp: Perf 2 jspl 4361, 93, 4407, 16, 28, 51, 65, 75, 85, 4500, 16, 29, 34, 46, 62, 69, 75, 89, 94, 4620, 24, 32, 38, 59, 68, 77, 4708, 19, 29 & 39, acidize w/ 6000 gals 20% NEA.
 7/82 CT CO: Washed perfs with 1000 gals 15% NEFE using CT unit
 6/90 CO, Perf, Acid: Swage tight spot in csg @ 1075'. Rpr WH. CO to 4800'. Perf 2 jspl 4403-12, 20, 34, 46, 55, 96, 4512, 25, 50, 58, 81, 85, 4616, 46 and 4712 (32 holes). AC all perfs w/ 6000 gals 15% NEFE in 3 stages w/ 3K# RS & 46 BS. Test csg ok.
 9/92 CO, Acid: CO to 4789' Acidize w/ 5000 gals 20% NEFE w/ 3K# RS & 144 BS. Set pkr @ 4250. Test csg ok.
 8/96 CO, Acid: CO fill from 4232' to 4788' (PBD)w/ 3 7/8\" bit. Acidize GSA perfs 4361'-4739' (92 holes) with 5000 gal 20% NEFE in 4 stages w/ 5000 # RS (good block). Pkr @ 4230. Test csg ok.
 8/04 MIT, CO, Perf, Acid: Tagged @ 4246' w/ bit. Attempt to find holes in 4 1/2\" csg w/ RBP & pkr? Set RBP @ 4220'. Repair hole in 8 5/8\" near WH by digging out cellar Pump 125 sx cmt down 4 1/2\" csg, no circ. DO cmt. TIH w/ 3 7/8\" bit and C/O to 4772' (scale, iron sulfate) Perf 4 jspl 4360'-4370' & re-perf 4400'-4440' (200 holes). Set pkr @ 4207. AC 6000 gls 15% NEFE & 4000# RS (good block). Set RBP @ 4207. Find holes f/ 377-439' w/ pkr. Sqz w/ 105 sx. Run CBL. Sqz w/ 100 sx. Test csg to 350# ok.
 7/05. Tagged @ 4764'.
 10/5/2007. Failed MIT pre-1cst

PBTD: 4,788
 TD: 4,800

Chevron U.S.A. Inc. Wellbore Diagram : VGSAU 047

