OCD Hobbs

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMLC031695B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
892000601H

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other: INJECTION

8. Well Name and No.
WARREN UNIT 41

2. Name of Operator
CONOCOPHILLIPS COMPANY

Contact: RHONDA ROGERS
E-Mail: rogerrs@conocophillips.com

9. API Well No.
30-025-25245-00-S1

3a. Address
3300 N "A" ST BLDG 6
MIDLAND, TX 79705

3b. Phone No. (include area code)
Ph: 432-688-9174

HOBBS OCD

10. Field and Pool, or Exploratory
WARREN

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 27 T20S R38E SESW 660FSL 1980FWL

NOV 20 2013

11. County or Parish, and State
LEA COUNTY, NM

RECEIVED

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

ConocoPhillips would like to perfore a Polymer Gel Treatment on this Injection well per procedures attached.

During this procedure we plan to use the Closed-Loop System and haul content to the required disposal.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #220121 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Hobbs
Committed to AFMSS for processing by JOHNNY DICKERSON on 09/18/2013 (13JLD0698SE)

Name *(Printed/Typed)* RHONDA ROGERS — Title STAFF REGULATORY TECHNICIAN

Signature (Electronic Submission) — Date 09/13/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JAMES A AMOS — Title SUPERVISORY EPS — Date 11/12/2013

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

MSB/OCD 11/20/2013

NOV 21 2013

CONOCOPHILLIPS COMPANY
Permian Basin Area
Warren Unit 41
API# 30-025-25245
NMLC031395B
POLYMER GEL TREATMENT- Gas Shut off
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A. History / Justification

The purpose of the proposed project is to perform a gel treatment on the existing Blinebry perforations to reduce water injection into the Blinebry Gas Cap (5834-5950) thus creating a better waterflood conformance. This will increase the injection (500 BWPD @ 1800 #) into the pay zone.

The Warren Unit #41 was originally drilled to 6910' and initially completed as a dual Blinebry-Tubb producer in March 1976 with Blinebry perforations from 5834-5950' overall and Tubb perforations from 6538-6645' overall. The Tubb perforations from 6538-6645' were acidized with 1800 gallons of 15% NE HCl and fracture treated with 34,000 gallons of gelled water and 60,000 lbs of 20-40 mesh sand. The Blinebry perforations from 5834-5950' were acidized with 1800 gallons of 15% NE HCl and fracture treated with 29,000 gallons of gelled water and 50,000 lbs of 20-40 mesh sand. During April 1984, Blinebry perforations were added from 5983-6165' overall and Tubb perforations were added from 6530-6645' overall. The Tubb perforations from 6530-6645' were acidized with 4000 gallons of 15% NEFE HCl. The Blinebry perforations from 5983-6165' were acidized with 1350 gallons of 15% NEFE HCl, and the Blinebry perforations from 5834-6165' were fracture treated with 34,860 gallons of gelled water and 67,500 lbs of 20-40 mesh sand. During June 1992, the Blinebry and Tubb were downhole commingled and the well was converted to a water injection well under NMOCD Order #R-6906-B. The Tubb perforations from 6530-6645' were cement squeezed with 200 sacks of cement. Then Blinebry perforations were added from 5932-6178' overall and Tubb perforations were added from 6589-6652' overall. The Blinebry perforations from 5834-6178' and the Tubb perforations from 6589-6652' were acidized with 5000 gallons of 15% NEFE HCl using a pinpoint injection packer. The injection packer was set at 5792' and water injection commenced on July 9, 1992.

B. Formation Properties:

Estimated frac gradient = < 0.75 psi/ft	H2S Concentration = 10 ppm
Estimated BHP = 2200 psi	H2S ROE @ 100 ppm = 0
BHT = 90 °F	H2S ROE @ 500 ppm = 0

C. Well Category:

Well Category 2. This well is not capable of hydrocarbon flow. Class 2, 3000 psi, Hydraulic BOP is recommended. **ONE BOP EXCEPTION**: One untested barrier – dynamic fluid column.

D. Actual Perforations:

Blinebry	5957' - 5966'	10'	2 SPF	20 holes
Blinebry	6087' - 6093'	7'	2 SPF	14 holes
Blinebry	6105' - 6112'	8'	2 SPF	16 holes
Blinebry	6212' - 6221'	10'	2 SPF	20 holes
Blinebry	6232' - 6243'	12'	2 SPF	24 holes
Blinebry	6251' - 6260'	10'	2 SPF	20 holes
Blinebry	6278' - 6293'	16'	2 SPF	32 holes

Blinebry	6301' - 6310'	10'	2 SPF	20 holes
Blinebry	6317' - 6327'	11'	2 SPF	22 holes
Blinebry	6338' - 6345'	8'	2 SPF	16 holes
TOTAL		102'		204 holes

Items to be supplied by Conoco Phillips

1. +/- 2500 barrels of fresh water Baker Hughes to test the water for gel quality (May need to be 1 % KCL) (6 hrs. setting time)
2. Frac Tank(s)
3. Valve on well.

E. Recommended Procedure

PLUGBACK:

1. Perform MIT (Mechanical Integrity Test) using pump kill truck. This is to be done at least a week ahead of job.
2. MIRU slick line unit with lubricator and double pack off. Make a run and confirm **TD @6424. Please report reading to production engineer. Libardo Gonzalez (432 202 8536)**
3. MIRU pumping equipment to place sand plug from surface.
4. RU and pressure test all equipment and lines. Hook up a pump-in T to the swab valve so that slick line can have access to the wellbore without rigging down the pumping equipment.
5. Attempts will be made to cover from TD **6424 to 6080'** with a sand pack. (Estimated sand for this coverage is (344' x 0.0375 bbls/ft x *600*#/bbl x 1.0 factor = **7740#** sand) carried at **6 to 7#**/gal yields ~ **1105 gals** of sand slurry.
6. Pump the desired amount of sand into the wellbore using the following Halliburton recommended procedure:
7. RU **Halliburton** acid single and mix 1200 gals of 40# gel on acid single.
8. Use approximately 20lbs of WG 22 to make the gel. The acid single will need to be neutralized before mixing the 40# gel.
9. Establish a pump rate of 1 bpm into the well using fresh water (provided by ConocoPhillips).
10. Add 5lbs of GBW 30 to the 1200 gals of 40# gel circulate through out.

11. Start pumping 40# gel at 1bpm. While pumping gel start adding 20/40 sand and BC 140 (x-linker) to the 40# gel. If all rates and pressure look fine (make sure this is below the calculated frac pressure of 4000 psi) (Note the MAWP for the job not to exceed 5000 psi), increase to 2 or 3 bpm, until all sand and gel is away. The additive rate should be 220lbs of sand for every 1BPM per every 1 minute and .04 gal of BC-140 for every 1 BPM. (ie. if pump rate is 2 BPM sand rate is 440 lbs/min and .08 gal of BC140)

12. Once the mixture has been pumped, flush well with 23 bbls of fresh water. Just enough to clear Tbg)

13. Shut down for 60 min allow breaker to destroy gel and allow sand to fall to bottom. Return the well to injection. Monitor injection rate and pressure. Communicate results to engineer.

14. MIRU lubricator rated to 5000 psi with pack off. MIRU slick line unit and prep to tag sand top to confirm placement at desired depth. Top of plug should be +/- 20 ft of target depth (6050'). Additional pumping may be required.

15. Once a desired sand top has been achieved, Shut in well for 24 hrs.

16. Retag sand top to confirm no movement since last tag.

17. Dump bail sand capping material (Latex Acid Resistive Cement, Hydromite) on top of sand to hold sand in place.

18. Place sand capping material until top is @ 6030'. Aprox 25 gals.

Gel Placement

19. Establish pumping rate and pressure. Pressure not to exceed fracturing pressure. Report tubing and backside pressures. A minimum of .5 bpm @ 1000 psi is a good estimate of what is need to proceed.

20. MIRU polymer gel pumping service company (Baker Hughes Atn: John Gould 432-638-0288 or Mark McNabb 432-638-0238). Treat Blinebry perfs w/ 130 barrels of fresh water carrying 1711 lbs of polymer. Treat down 2 3/8" injection string at 8 BPM with max P of 2200 psig as follows:

21. Start Mixing Marcit Gel (Molecular Weight). Pump the Marcit and and Capit gel blend as below: Note: Service Company will continuously monitor pressure and rates. Treatment will be terminated should the real-time data acquisition system note a steep Hall plot slope.

- Pump 60 barrels of 8000 ppm gel.
- Pump 40 barrels of 10000 ppm gel.
- Pump 30 barrels of Capit ((mix of 10,000 ppm 6 Mil MW and 20,000 ppm low MW gel)

Since the total pumping time @ .5 bpm is 5.6 hrs. BHT needs to make sure crosslinking time is 6 hrs as minimum.

22. Displace to top perf. Wellbore Volume to Bottom Gas Cap volume (28 bbls)

23. Shut in well for 4 days.

24. Pressure test against gel plug to 1500 psi.

25. If plug holds prepare to Clean Out. Otherwise communicate to engineer.

. **Clean Out**

26. MIRU Service unit.

27. RU 5 K psi lubricator, test lubricator to 3000 psi. Based on results from gauge ring. RIH w / blanking plug and set in profile nipple (1.996" unknown profile type) might be encountered. Pressure test plug/tubing to 1500 psi.

28. ND WH, NU annular preventer, double ram hydraulic BOP with blind rams in bottom and 2 3/8" pipe rams in top - minimum 3000 psi equipment. Unlatch f/packer. Release on/off tool. Circulate with 10# brine. Latch on to packer and unset packer. Tag for fill. TOH with w/ 7" packer on 2 3/8 "tubing. Scan tubing while going out. LD red and green jts.

29. TIH with injection packer with on/off tool on 2⅜", 4.7#/ft, J-55 tubing IPC w/ TK-99. Hydrotest tubing below slips while TIH. Set injection packer at 5900 '+. Note: Packer cannot be set more than 100' above top perf at 5957' as per regulatory requirements.

30. Load tbg / annulus. Release from on/off tool. Circulate packer fluid to surface. Latch to on/off tool. Notify NMOCD to witness mechanical integrity test. Pressure test casing to 500 psig for 30 minutes, recording test using circular chart.

31. ND BOP and NU injection WH. RDMO well service rig. Clean location. Connect surface lines