

Submit 1 Copy To Appropriate District Office  
 District I - (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II - (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV - (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

|   |
|---|
| WELL API NO.<br>30-025-26604  |
| 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.  |
| 7. Lease Name or Unit Agreement Name<br>HOBBS N STATE   |
| 8. Well Number 5  |
| 9. OGRID Number 4323  |
| 10. Pool name or Wildcat<br>VACUUM; ABO REEF  |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)  |

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well Gas Well  Other **HOBBS OCD**

2. Name of Operator  
CHEVRON U.S.A. INC. **MAY 04 2015**

3. Address of Operator  
15 SMITH ROAD, MIDLAND, TEXAS 79705 **RECEIVED**

4. Well Location  
 Unit Letter: H 1980 feet from NORTH line and 330 feet from the EAST line  
 Section 8 Township 18S Range 35E NMPM County LEA

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

|  |   |  |  |
|--|---|--|--|
| <b>NOTICE OF INTENTION TO:</b>                 |   | <b>SUBSEQUENT REPORT OF:</b>                     |  |
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/>           | ALTERING CASING <input type="checkbox"/> |
| TEMPORARILY ABANDON <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>     | COMMENCE DRILLING OPNS. <input type="checkbox"/> | P AND A <input type="checkbox"/>         |
| PULL OR ALTER CASING <input type="checkbox"/>  | MULTIPLE COMPL <input type="checkbox"/>   | CASING/CEMENT JOB <input type="checkbox"/>       |  |
| DOWNHOLE COMMINGLE <input type="checkbox"/>    |   | OTHER:   |  |
| CLOSED-LOOP SYSTEM <input type="checkbox"/>    |   |  |  |
| OTHER: INTENT TO ADD ABO PAY                   |   |  |  |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

CHEVRON U.S.A. INC. INTENDS TO ADD ABO PERFS HIGHER IN THE RESERVOIR SECTION, ACID STIMULATE & RETURN TO PRODUCTION.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE AND WELLBORE DIAGRAM.

DURING THIS PROCESS, WE PLAN TO USE THE CLOSED LOOP SYSTEM WITH A STEEL TANK AND HAUL TO THE REQUIRED DISPOSAL, PER THE OCD RULE 19.15.17.

Spud Date:  Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *Denise Pinkerton* TITLE REGULATORY SPECIALIST DATE 04/29/2015

Type or print name DENISE PINKERTON E-mail address: leakejd@chevron.com PHONE: 432-687-7375

For State Use Only

APPROVED BY: *[Signature]* TITLE Petroleum Engineer DATE 05/04/15

Conditions of Approval (if any):

MAY 05 2015

*AM*

Well: Hobbs 'N' State #5  
Field: Vacuum  
API #: 30-025-26604  
Lea County, New Mexico

## Engineering Comments

The subject well is a marginal producer that is currently producing. It is recommended that the well be proactively pulled to add incremental Abo pay higher in the reservoir section. The subject well was drilled in 1980 and completed in the Vacuum Abo Reef pool from which it still produces today. It has produced ~329 MBO and 362 MMCF and currently produces ~7 BOPD, 24 BWPD, and 8 MCFPDS on a near flat decline. Many Abo completions have previously benefited from adding Abo pay higher in the reservoir section. An incremental production forecast was generated based on these completions - analog wells include the State 'AN' #1, State 'AN' #2, State 'AB' #2, and the State 'AB' #9.

Economics are based on the difference case for adding incremental production vs. status quo. The base case forecasts an IP of 17 BOPD (10 BOPD incremental) that is based off of similar work that has historically been performed on area wells. The alternative case will be the "do nothing" case and allow for the well to continue to produce at ~7BOPD declining at 4%. The case was ran for 7 years.

The investment total project cost that the WBS has funded is 290.69 M\$ - 1.71 DPI. The WBS contains funds to replace BHA, tubing, and rods where needed.



Brentz Britton

4/2/2015

**Hobbs 'N' #5 Add Pay Recommendation**  
**Sect: 8-T18S-R35E**  
**30-025-26604**

The Hobbs 'N' #5 was drilled in 1980 and completed in the Vacuum Abo Reef pool from which it still produces today. It has produced ~329 MBO and 362 MMCF and current produces ~7 BO, 24 BW and 8 MCFPD on a near flat decline. When the well fails or is pulled for any other reason I recommend we add additional Abo pay higher in the reservoir section.

Many area Abo Reef completions have previously benefitted by adding perms into the dolomite stringers within the overlying "Abo Shale" section, the premise being that these stringers are a vertical continuation of the Abo reef reservoir deposited toward the end of the reef framework deposition as the reef became choked out either as transgression exceeded the build rate or some other depositional change occurred. Lithologically, this overall interval is more accurately a dirty, silty dolomite section which can include reservoir intervals characterized by a low to moderate GR, high Rt, as well as sonic log indicated porosity stringers and slight mud log shows as is the case here with the N #5. Note though that the N #5 mudlog must be heavily discredited across this interval due to oil being used as a friction reducer just above the Abo although that effect does diminish and actual "formation gas" shows are reported across some of the interval being proposed for perforating.

To add Abo pay in this well, tie into Welex's GR-MicroSeismogram log dated 3/13/1980 (strip attached), and perforate 8661-66', 8717-29', 8760-68', and 8782-84, then acid stimulate and return to production.

Scott Ingram X7212  
6/2/14

**Chevron**



**Hobbs N State No. 5**

**Add Pay & Stimulate**

ChevNo: F16514 API #: 30-025-26604

Operator: Chevron U.S.A. Inc.

Location: Vacuum County: Lea

Spud: 01/03/1980 Completion: 04/07/1980

Updated: TFIZ 11/12/14 DUXG 3/10/15

**Pre-work:**

1. Utilize the rig move check list and complete electric line route survey with FMT.
2. Check anchors and verify that a pull test has been completed in the last 24 months.
3. Ensure location of & distance to power lines is in accordance with MCBU SWP. Complete an electrical variance and RUMS if necessary.
4. Ensure that location is of adequate build and construction.
5. **Ensure that elevators and other lifting equipment are inspected. Calliper all lifting equipment at the beginning of each day or when sizes change.**
6. When NU anything over an open wellhead (EPA, etc.) ensure the hole is covered to avoid dropping anything downhole.
7. Review H2S calculation radius of exposure.
8. Review JSA and identify hazards with crew. Visually inspect wellhead, casing, and tubing valves. Decide whether tubing and casing valves can be used or replaced as needed. Isolate hazardous energy. Bleed down well as necessary.
9. Any equipment installed at the wellhead (ID) is to be visually inspected by the WSM to insure that no foreign debris or other restrictions are present.
10. If wireline is to be used (i.e. perforating guns, collar locator, or logging tools) tools need to be callipered and reported on the daily WellView report.
11. Get the next procedure for the next well.
12. Unhang wellhead.



Hobbs N State No. 5

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Updated: TFIZ 11/12/14 DUXG 3/10/15

**Procedure:**

1. MIRU workover rig. Note tubing and casing pressure on well. Bleed well down.
  - **If needed use 10 ppg brine to kill well.**
2. Remove stuffing box and lay down polish rod.
3. Unseat pump and TOO H racking back rods.
  - **Inspect rods and replace any that show signs of wear or pitting.**
  - **Note the conditions of the rods in wellview.**
4. Ensure well is dead. ND WH.
  - **If necessary kill well with 10ppg brine.**
  - **Observe well for 30 minutes to ensure that it is dead.**
5. NU Chevron Class II configured 5M remotely-operated hydraulically-controlled BOP with 2-7/8" pipe rams on top and blind rams on bottom. NU EPA pan. Perform accumulator draw down test. Not test results in wellview.
  - **Function test the blind rams prior to NU the BOP.**
6. Rig up floor. Unset 5 1/2" TAC, POOH one stand and PU a compression or cup test packer. RIH and set test packer ~25'. Test 2-7/8" pipe rams to 300 5 minutes low. Test 500 high for 5 minutes. Record test pressures in wellview.
  - **Keep a copy of the stump test provided by the BOP company.**
  - **Bleed the pressure off between each test. Do not step up the pressure.**
7. RIH and tag fill.
  - **Consult with RE to see if we need to do a clean out run.**
8. POOH scanning with production tubing.
  - **Rack back all tubing with 25% wall loss or less and lay down the rest. Order replacement 2-7/8" L-80 8rd 6.5# as needed.**
9. PU a 4-3/4" bit on 2-7/8" L-80 8rd 6.5# workstring.

**Chevron**



**Hobbs N State No. 5**

**Add Pay & Stimulate**

ChevNo: FI6514 API #: 30-025-26604

Operator: Chevron U.S.A. Inc.

Location: Vacuum County: Lea

Spud: 01/03/1980 Completion: 04/07/1980

Updated: TFIZ 11/12/14 DUXG 3/10/15

➤ **If no fill was tagged then skip to step 14.**

10. TIH and tag fill.

11. RU power swivel.

12. Gain circulation and begin cleaning out fill to PBTD. (9151')

➤ **Collect samples of fill and hand them over to chemical rep or analysis.**

13. Circulate the well clean and TOOH racking back WS and laying down BHA.

14. MIRU wireline.

➤ **Test lubricator to 1000 psi prior to picking up tools.**

➤ **Set an exclusion zone.**

15. PU and RIH with 3-1/8" HP Slick Guns with 2 SPF and perforate new Abo perforations 8,661-66', 8717-29', 8760-68', 8782-84'. Tie into Welex's GR-MicroSeismogram Log dated 03/13/1980.

16. POOH with wireline.

17. RDMO wireline.

18. PU a notched collar, 500' of workstring and 5 1/2" treating packer on WS and RIH.

➤ **The length from the top perf to PBTD is 490'. The packer should never enter the perforations.**

19. Set treating packer so that the notched collar is at 8561'.

➤ **Top perf is at 8661'.**

20. Test the casing to 500 psi for 5 minutes. If test fails then notify RE.

21. If needed pump scale converter per chemical reps recommendation and flush to bottom perforations. SION. If scale converter is not needed skip to pumping the acid job.

➤ **If scale converter is pumped, swab back load.**

➤ **Test lines to 5,000 psi prior to pumping anything.**



Hobbs N State No. 5  
Add Pay & Stimulate  
ChevNo: F16514 API #: 30-025-26604  
Operator: Chevron U.S.A. Inc.  
Location: Vacuum County: Lea  
Spud: 01/03/1980 Completion: 04/07/1980  
Updated: TFIZ 11/12/14 DUXG 3/10/15

22. MIRU acid contractor. Monitor casing pressure throughout acid job. Bleed back to open top pit with a horn at the top. If pressure exceeds 500 psi during acid job or if communication occurs shut down and notify RE. Acidize perforations (8661-8931) with 6500 gallons of 15% HCL mixture dropping GRS per the attached petroplex proposal. Flush to bottom perms @ 8937' with fresh water. **Maximum surface pumping pressure is 5000 psi. Set pop-off to 4900 psi.** Report acid volumes and pressures on morning wellview report.
  - **Test pop off using FW. Set the trucks kill switch to go off at 4500 psi.**
23. Record ISIP, 5, 10, and 15 minute SIP's. Allow acid to spend 2 hour. Flow well back on a choke.
  - **If needed swab back until we have 100% of the load or formation fluid return to surface.**
24. Unset packer and TIH and tag salt.
25. Clean out salt to PBTD. (9151')
26. POOH with notched collar, packer and WS laying down.
27. PU and RIH with 2-7/8" L-80 8rd 6.5# production tubing and production BHA.
28. Set TAC.
29. Monitor the well for 30 minutes to ensure it is dead.
30. ND BOP and NU WH.
31. TIH with rods and pump per the attached rod design. Load and test tubing and long stroke the pump.
  - **If there is a pumping unit on location then space out. If not talk to the ALCR and space out based off of the given measurements.**
32. RDMO
33. **Conduct well hand off with FMt using handover form.**
34. Turn well over to production.



Hobbs N State No. 5

Add Pay & Stimulate

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Operator: Chevron U.S.A. Inc.

Location: Vacuum County: Lea

Spud: 01/03/1980 Completion: 04/07/1980

Updated: TFIZ 11/12/14 DUXG 3/10/15

## STANDARD GUIDELINES

### **Maximum Anticipated H2S Exposures (RRC H9 / NM Rule 36 )**

All personnel on location must be made aware of each of the following values (values vary by field):

*Maximum anticipated amount of H2S that an individual could be exposed to is 16,000 ppm*

*at the maximum anticipated escape volume (of wellbore gas) of 10 MCF/D*

*100 ppm Radius of Exposure is 32 feet.*

*500 ppm Radius of Exposure is 15 feet.*

### **Elevators**

At every tubing size change, the elevators must be calipered and all lifting equipment must be visually inspected for the correct sizing, and rechecked daily. The elevators must also be checked for proper sizing by placing a pony sub in the elevators. Prior to picking up power swivel, caliper and visually inspect elevators and bail on swivel. Checks are to be documented in the JSA and elevator log.

### **ND/NU**

Prior to N/D, N/U operations, if only one mechanical barrier to flow will be in place, visual monitoring of well condition by the WSM is necessary for 30 minutes or more to ensure that the well is static *before* removing or replacing well control equipment. For all deviations to 2B policy, check that MOC for exemption from 2B policy is in place and applicable. During ND/NU operations with only one barrier to flow in-place, constant visual monitoring of well condition *during ND/NU* by the WSM is necessary.

### **Installed Equipment**

Any and all equipment installed at the surface on the wellbore is to be visually inspected (internally) by the WSM prior to N/U to the wellhead by the service provider to ensure no debris or other potential restrictions are present. During any NU ops over an open wellhead (BOP, EPA, etc.), ensure the hole is covered to avoid dropping anything downhole.

### **Hazard ID**

Identify hazards with the crew as they come up during the job. Stop and review and discuss JSAs.

### **Scale and Paraffin Samples**

When removing rods and/or tubing from a well, collect samples of any paraffin and/or scale.

When drilling, note, report and sample significant returns of scale or paraffin, or anything other significant returns. Assume that samples that come from different areas/environments in the well are different and require a different sample; e.g. top/bottom of well, inside outside of tubing.

Always collect enough sets of samples for both Production and D&C Chemical Reps. Send any samples to Chemical Reps., both for

- 1) Production (many times Baker), as well as for
- 2) D&C (many times PetroPlex).

Discuss D&C's Chemical Rep's recommendations with Engineering, or simply implement as practical.

**Chevron**



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***Trapped Pressure***

Recognize whether the possibility of trapped pressure exists, check for possible obstructions by:

- Pumping through the fish/tubular – this is not guaranteed with an old fish as the possibility of a hole above the obstruction could yield inconclusive results
- Dummy run – make a dummy run through the fish/tubular with sandline, slickline, e-line or rods to verify no obstruction. If unable to verify that there is no obstruction above the connection to be broken, or if there is an obstruction:
- Hot Tap at the connection to check for pressure and bleed off
- Observe and watch for signs / indicators of pressure as connection is being broken. Use mud bucket (with seals removed) and clear all non-essential personnel from the floor.

***Wireline***

For all wireline and slickline jobs (except in new, cemented, tested and unperforated casing) install wireline packoff and lubricator. Follow Standard Guideline for installing equipment over wellhead. Test to 250 psi on the low end, and test on the high end based on SITP or max anticipated pressure. Establish exclusion zone around wellhead area. Observe and enforce radio silence as needed for explosives. All wireline tools are to be calipered and documented on a diagram prior to PU and RIH. This is critical information in the event of fishing operations.

### Procedure for acid job

- Step 1. Arrive on location perform safety meeting, job scope, and review JSA.
- Step 2. Verify treating packer setting at +/- 8,719 Ft.
- Step 3. Rig up to back side. Load and test to 350 PSI. Monitor during job.
- Step 4. Rig up to tubing, and test lines to 7,000 PSI.
- Step 5. Establish pumping rate and pressure with fresh water.
- Step 6. Begin pumping 38 barrels of acid
- Step 7. Begin pumping +/- 700 pounds of medium grade rock salt
- Step 8. Begin pumping 38 barrels of acid
- Step 9. Begin pumping a 14 barrel brine spacer to place 1<sup>st</sup> block fully on formation
- Step 10. Begin pumping +/- 700 pounds of medium grade rock salt (May adjust according to 1<sup>st</sup> block stage.)
- Step 11. Begin pumping 38 barrels of acid
- Step 12. Begin pumping a 14 barrel brine spacer to place 2<sup>nd</sup> block fully on formation
- Step 13. Begin pumping +/- 700 pounds of medium grade rock salt (May adjust according to 2<sup>nd</sup> block stage.)
- Step 14. Begin pumping final acid stage of +/- 41 barrels
- Step 15. Begin pumping flush stage of 63 barrels
- Step 16. Shut down and record ISIP, and SIP at 5 min, 10 min, and 15 min intervals.
- Step 17. Rig down Petroplex and clean up location.
- Step 18. Allow acid to spend for 2 hours then recover load.

**CURRENT WELLBORE DIAGRAM  
ACTIVE OIL PRODUCER  
Hobbs "N" State #5**

**LOCATION**

|                  |                     |
|------------------|---------------------|
| State            | New Mexico          |
| County           | Lea                 |
| Surface Location | 1980 FNL, 330 FEL   |
|                  | Sec 8, R-35E, T-18S |
|                  | Unit Ltr H          |

**CASING DETAIL**

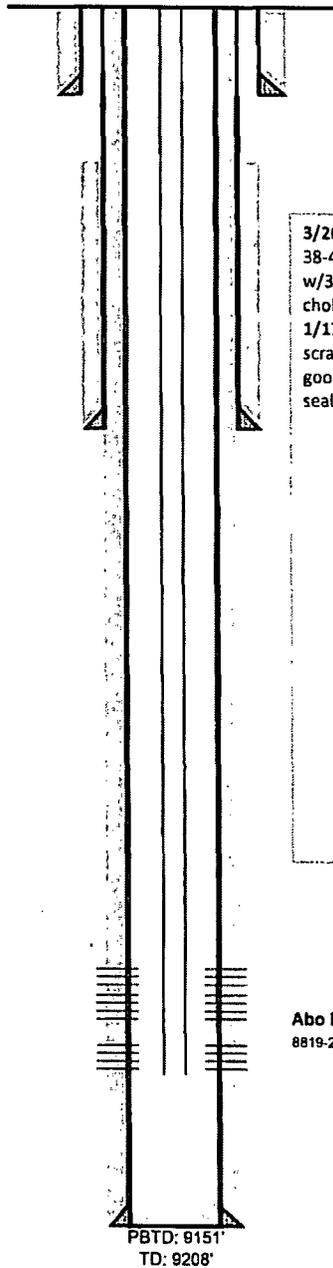
|                          |                  |
|--------------------------|------------------|
| <b>Surface Csg.</b>      |                  |
| Size:                    | 11-3/4"          |
| Wt.:                     | 42# H-40         |
| Set @:                   | 300'             |
| Sxs cmt:                 | 299sx class "C"  |
| TOC:                     | Surface          |
| Hole Size:               | 15"              |
| <b>Intermediate Csg.</b> |                  |
| Size:                    | 8-5/8"           |
| Wt.:                     | 24# & 32#        |
| Set @:                   | 3300'            |
| Sxs Cmt:                 | 950sx class "H"  |
| TOC:                     | 1245'            |
| Hole Size:               | 10-5/8"          |
| <b>Production Csg.</b>   |                  |
| Size:                    | 5-1/2"           |
| Wt.:                     | 17# & 15.5#      |
| Set @:                   | 9206'            |
| Sxs Cmt:                 | 1750sx class "H" |
|                          | 2250sx class "C" |
| TOC:                     |                  |
| Hole Size:               | 7-7/8"           |

**WELL ID INFORMATION**

|            |                    |
|------------|--------------------|
| Lease Name | Hobbs "N" State #5 |
| Field      | Vacuum Abo Reef    |
| Reservoir  | Abo Reef           |
| Ref #      | F16514             |
| API #      | 30-025-26604       |

KB:  
DF:  
GL: 3946'  
Spud Date: 1/3/1980  
Compl. Date: 4/7/1980

3/20/1980: Initial Completion - Abo Reef. Perfs 8819-25, 38-46, 59-63, 8905-10, 13-22, 31-37 (44 holes). Acidized w/300gals 15% NEA (150 gals 2 times). 24 Hr test on 24/64 choke: 281 bo/D bw/250 mcf.  
1/17/1984: Remedial Work, Ran 4-3/4" bit and casing scraper to 9151', Ran pkr to 8710' and test csg to 500# - good. Acidize perfs 8819-8937' w/4500gals 15% NEFE + ball sealers. MaxP 3940#, IR 4bpm, ISIP 1800#.



**Proposed Abo Reef perforations**  
8661-66', 8717-29', 8760-68', 8782-84'

**Abo Reef perforations**  
8819-25, 8838-46, 8859-63, 8905-10, 8913-22, 8931-37 (44 ho'es)

PBTD: 9151'  
TD: 9208'