

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., 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-103  
May 27, 2004

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

WELL API NO. 30-045-10137
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Calloway LS
8. Well Number 2
9. OGRID Number 000778
10. Pool name or Wildcat Blanco Mesaverde Aztec PC

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

2. Name of Operator  
BP AMERICA PRODUCTION COMPANY

3. Address of Operator  
P.O. BOX 3092 HOUSTON, TX 77253-3092

4. Well Location  
Unit Letter H : 1840 feet from the North line and 800 feet from the East line  
Section 4 34 Township 31N Range 11W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
5660 GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material Impervious

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: Squeeze off Cliffhouse ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

BP America requests permission to squeeze off the Cliffhouse formation and continue producing from the Pictured Cliffs, Point Lookout & Menefee formations.

Please see the procedure attached. If you have any questions call Ann Fickinger 326-9483

RCVD OCT 9 '07  
OIL CONS. DIV.  
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Cherry Hlava TITLE Regulatory Analyst DATE 10-8-07

Type or print name Cherry Hlava E-mail address: hlavac@bp.com Telephone No. 281-366-4081

For State Use Only

APPROVED BY: H. Villanueva Deputy Oil & Gas Inspector, District #3 DATE OCT 09 2007  
Conditions of Approval (if any):

## **SJ Basin Well Work Procedure**

**Well Name:** Calloway Ls 2 – Cliffhouse Squeeze

**Date:** October 1, 2007

**Repair Type:** Well Servicing

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**Objective:** Squeeze off the Cliffhouse formation, and remain producing from Picture cliff, Pointlook out and Menefee formations.

1. Treat with H2S biocide treatment
2. Pull completion – pumping unit.
3. Test casing
4. Squeeze off Cliffhouse formation
5. Return to production with plunger (Picture cliff, Menefee and Pt Lookout formations only).

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<b>Location:</b>	<b>T31N-R11W-Sec34</b>	<b>API #:</b>	<b>30-045-10137</b>
<b>County:</b>	<b>San Juan</b>		
<b>State:</b>	<b>New Mexico</b>	<b>Engr:</b>	<b>Anne Fickinger</b>
<b>Horizon:</b>	<b>MV/DK</b>	<b>ph</b>	<b>505-326-9483</b>
<b>CO2 :</b>	<b>0.4%</b>	<b>Cell :</b>	<b>505-486-9249</b>
<b>H2S:</b>	<b>0ppm 6-2-07 (Has continuous injection on location)</b>		

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### **Procedure:**

1. Check anchors. Check ID wellhead, determine if equipment is acceptable or obsolete and replace if necessary, if earth pit is required have One Call made 48 hours prior to digging.
2. Notify BLM and NMOCD 24 hours prior to beginning operations.
3. MIRU workover rig. LOTO all necessary equipment including but not limited to: meter run, automation, separator, and water line.
4. Blow down casing to pit or flowback tank. Pump tubing capacity plus 5 barrels of L64 to displace any potential condensate in tubing string.
5. Rig up water pump. Remove horsehead and test tubing.
6. Blow down well.
7. Rig down polish rod and trip out of hole
8. RU WL unit. Pressure test lubricator and equipment with shut-in wellhead gas pressure. TIH and set two barriers (profile plugs, CIBPs or G-packoffs) for isolation of tubing string and to comply with DWOP double barriers.

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9. Check all casing strings to ensure no pressure exist on any annulus. **The operations of removal of wellhead and installation of BOP's will be performed under a dispensation for one (1) barrier on the backside**
10. Nipple down Wellhead. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi above BHP
12. Install stripping rubber, pull tubing hanger and shut pipe rams. Strip tubing hanger out of hole.
13. TOOH and LD 2-3/8" production tubing currently set at **4654'**. Inspect tubing and report scaling, corroding tendency to engineer.
14. Pick up and TIH with tubing, bit, and scraper for 7" casing to **2188'** (utilize approved barriers). Work scraper across **Picture Cliff** perforation intervals if needed.
15. RIH with workstring and set RBP at **2188'** (50' above PC). Load well with fluid. Pressure test casing. If casing doesn't test find hole in casing. Contact production engineer if squeezes are required.
16. RIH and retrieve RBP at **2188'**.
17. RIH with tubing, bit and scraper for 7" casing from **3700' to 4184'** (utilize approved barriers). Work scraper across **Cliffhouse** perforations.
18. Repeat three more times to ensure perforations are clean of scale, iron sulfides, etc.
19. RIH and set RBP at **4144'** and place sand on top of RBP (~10' of sand).
20. RIH and set EZSV at **3740'**.
21. Sting into the retainer and establish injection rate into formation with an Acid treatment (to ensure perforations are clean). Contact Schlumberger to recommend treatment amount. Pump buffer treatment followed by cement. Pull out of retainer. Circulate while POOH to ensure tubing is clean of cement. WOC. This should plug the Cliffhouse formation.
22. RIH and drill out EZSV and cement. Do not drill out RBP. Leave RBP @ **4144'**.
23. RIH and set packer at **3740'**. RIH with Workstring to **3790'** and pressure test Squeeze. If squeeze does not hold, contact engineer.
24. POOH workstring, packer and RBP.
25. RIH and tag for fill.
26. Rig up air package/unit, pressure test all lines (Testing procedure to be supplied from air company). Cleanout fill to PBTD @ **4676'**. Blow well dry at PBTD.

27. POOH. Reference "Under Balanced Well Control Tripping Procedure".
28. TIH with new 2-3/8" tubing. Reference "Under Balanced Well Control Tripping Procedure".
29. Land 2-3/8" production tubing at +/- **4585'** (no deeper)'. Lock down hanger.
30. Pressure test tubing to 500 psi with air unit, make sure tubing spool valves are open. Care should be taken during pressure testing of the tubing due to potential problem caused if tubing parts close to surface or above the hanger. Check all casing string for pressure. The operations of removal of BOP and installation of wellhead will be performed under a dispensation for one (1) barrier on the backside.
31. ND BOP's. NU Wellhead. During Master valve placement ensure the top of hanger has spacer nipple in place to bottom of bonnet flange so plunger equipment will not hang up through tree. Pressure test Wellhead if capable.
32. RU WL unit. Run gauge ring for 2-3/8" tubing and broach tubing. Pull plugs and set tubing stop for plunger. Communicate plunger equipment status to IC room personnel.
33. RD slickline unit.
34. Test well for air. Return well to production.
35. Ensure all reports are loaded into DIMS. Print out summary of work and place in Wellfile. Have discussion with production engineer/optimizer about particulars of well when handing off the well file.

## Calloway LS #2

Sec 34, T31N, R11W

API #: 30-045-10137

GL 5863'

### History

- Drilled & completed PNLK in 1957
- BH repair in 1993
- Perf'd @ 1620' w/ 2 JSPFPumped 530 sx cmt and circ'd 7 bbls cmt to surf Tested csg to 500 psi BH still leaking
- Payadd MENF and CLFH, DHC MVRD with PCCF in 12/2004
- \* 2005 drilled PBTD deeper
- 5-31-06 Well servicing - broken pump

### Bradenhead History

- Jan 1998 BH had continous trickle during test
- Jul 1998 BH press TSTM, had a trickle of water through the test
- Dec 1999 Gas press bled down instantly Water flowed at a steady drip for entire test Made about 2 gallons per half hour

### Pictured Cliffs Perforations

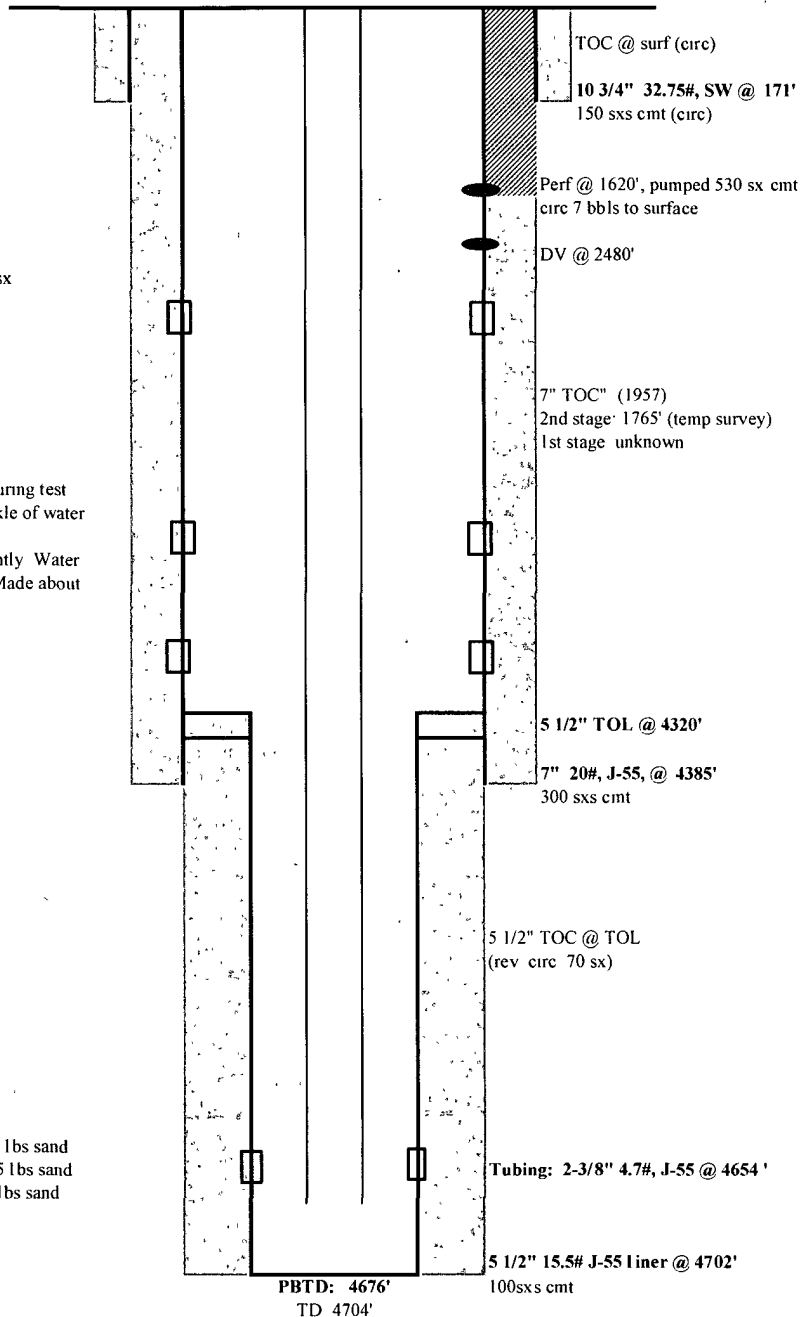
2238' - 2284', frac'd w/ 40,000 lbs sand

### Profiles

X-nipple (1 875" ID) @ 4598'  
F-nipple (1 780" ID) @ 4603'

### Mesaverde Perforations

CLFH 3800' - 4084', frac'd w/ 171,000 lbs sand  
MENF 4172' - 4451', frac'd w/ 118,145 lbs sand  
PNLK 4485' - 4590', frac'd w/ 60,000 lbs sand



10/1/07 AF

**Proposed Squeeze Procedure**  
**Calloway LS #2**  
 Sec 34, T31N, R11W  
 API # 30-045-10137

GL 5863'

**History**

- Drilled & completed PNLC in 1957  
 - BH repair in 1993  
 Perf'd @ 1620' w/ 2 JSPFPumped 530 sv cmt and circ'd 7 bbls to surf Tested csg to 500 psi BH still leaking  
 - Pay add MENF and CLFH  
 DHC MVRD with PCCF in 12/2004  
 \* 2005 drilled PBTD deeper  
 5-31-06 Well servicing - broken pump

**Bradenhead History**

- Jan 1998 BH had continuous trickle during test  
 - Jul 1998 BH press TSTM, had a trickle of water through the test  
 - Dec 1999 Gas press bled down instantly Water flowed at a steady drip for entire test Made about 2 gallons per half hour

**Pictured Cliffs Perforations**

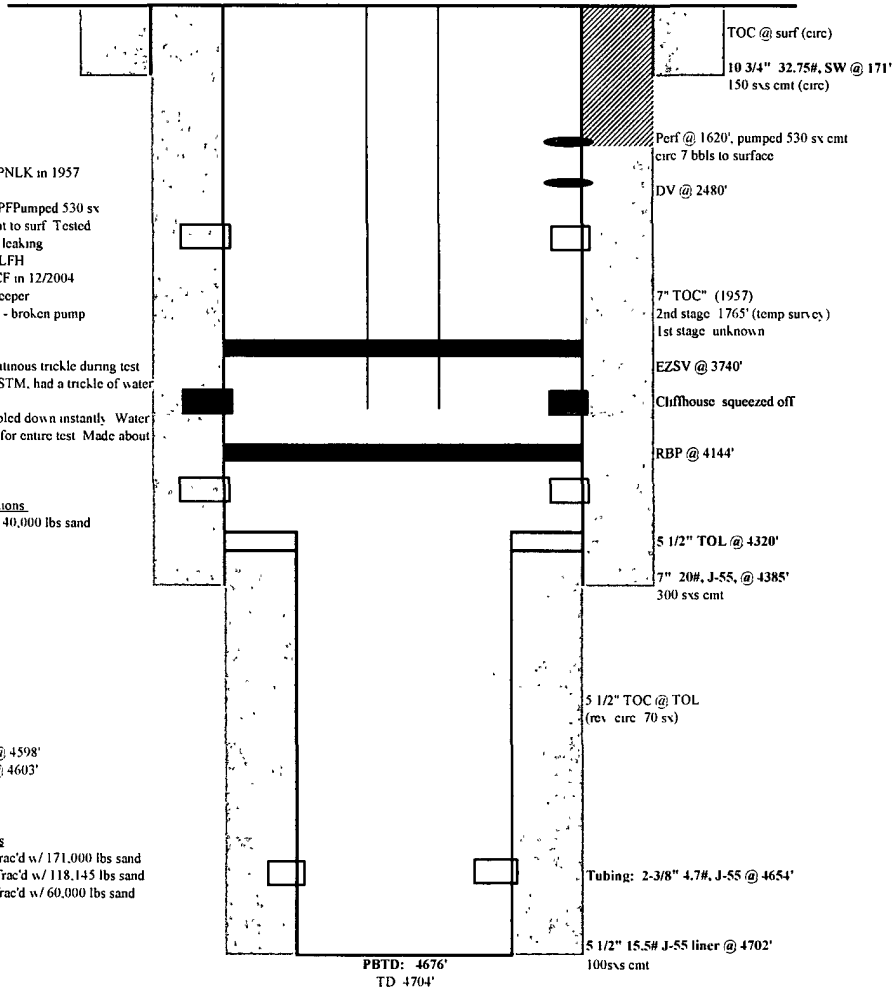
2238' - 2284' frac'd w/ 40,000 lbs sand

**Profiles**

X-nipple (1.875" ID) @ 4598'  
 F-nipple (1.780" ID) @ 4603'

**Mesa Verde Perforations**

CLFH 3800' - 4084', frac'd w/ 171,000 lbs sand  
 MENF 4172' - 4451', frac'd w/ 118,145 lbs sand  
 PNLC 4485' - 4590', frac'd w/ 60,000 lbs sand



10/1/07 AF