

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135

Expires November 30, 2000

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**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. SF - 077123
2. Name of Operator BP America Production Company Attn: Mary Corley		6. If Indian, Allottee or tribe Name
3a. Address P.O. Box 3092 Houston, TX 77253	3b. Phone No. (include area code) 281-366-4491	7. Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1700' FNL & 1090' FEL Sec 14 T28N R09W		8. Well Name and No. Warren LS 4
		9. API Well No. 30-045-07470
		10. Field and Pool, or Exploratory Area Blanco Mesaverde & Otero Chacra
		11. County or Parish, State San Juan County, New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Abandon
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Water Disposal	
	<input type="checkbox"/> Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Other	

P&A PC; Complete to CH & DHC CH & MV

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 recompleat 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 recompleat 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.

BP America Production Company request permission to plug the Pictured Cliffs interval and temporarily abandon the Mesaverde Lower perforations; then perforate & frac the Upper Mesaverde and Otero Chacra Pools and commingle production Downhole as per the attached procedure

The Blanco Mesaverde (72319) and Otero Chacra (82329) Pools are Pre-Approved Pools for Downhole Commingling per NMOCD order R-11363. The working and overriding royalty interest owners in the proposed commingled pools are not identical, therefore all interest owners are being notified via certified mail return receipt requested.

Production is proposed to be allocated based on a fixed percentage based on well test. It is our intent complete the Upper Mesaverde, then complete into the Chacra, stabilize production and perform flow rate test on the Chacra, drill out the CIBP isolating the Mesaverde, commingle production and perform a flow rate test for the combined zones. The production rate for the Mesaverde will be determined using the flow rate test for the combined pools and minus the Chacra flow test rate. The resulting volumes will be used to determine a fixed percentage rate to be allocated to each pool.

Commingling Production Downhole in the subject well from the proposed Pools with not reduce the value of the total remaining production

14. I hereby certify that the foregoing is true and correct		<b>CONDITIONS OF APPROVAL</b>	
Name (Printed/typed) Mary Corley	Title Senior Regulatory Analyst		
Signature <i>Mary Corley</i>	Date 4/13/2005		
<b>THIS SPACE FOR FEDERAL OR STATE OFFICE USE</b>			

Approved by <i>Matt Hallat</i>	Title PETR ENG	Date 3/2/06
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 BLM - FFO.		

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.

NMOCD

District I  
1625 N. French Dr., Hobbs, NM 88240

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

2006 FEB 27 PM 2 35

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-045-07470</b>	<sup>2</sup> Pool Code <b>82329</b>	<sup>3</sup> Pool Name <b>Otero Chacra</b>
<sup>4</sup> Property Code <b>001212</b>	<sup>5</sup> Property Name <b>Warren LS</b>	<sup>6</sup> Well Number <b>4</b>
<sup>7</sup> OGRID No. <b>000778</b>	<sup>8</sup> Operator Name <b>BP America Production Company</b>	<sup>9</sup> Elevation <b>6091' GR</b>

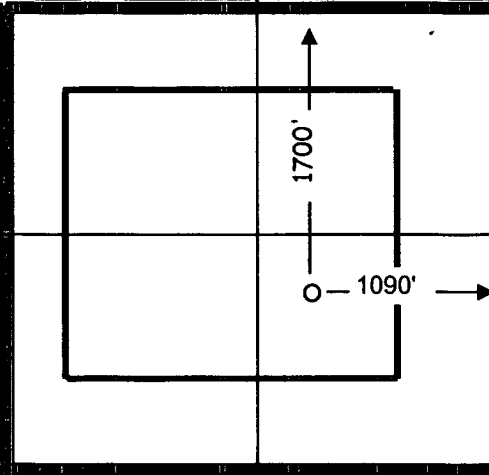
<sup>10</sup> Surface Location

UL or lot no. <b>Unit H</b>	Section <b>14</b>	Township <b>28N</b>	Range <b>09W</b>	Lot Idn	Feet from <b>1700</b>	North/South <b>North</b>	Feet from <b>1090</b>	East/West <b>East</b>	County <b>San Juan</b>
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from	North/South	Feet	East/West	County
<sup>12</sup> Dedicated Acres <b>160</b>		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code			<sup>15</sup> Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Mary Corley</i> Signature <b>Mary Corley</b> Printed Name <b>Sr. Regulatory Analyst</b> Title <b>2/21/2006</b> Date
	<sup>18</sup> SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. <b>on file</b> Date of Survey Signature and Seal of Professional Surveyor:
	Certificate Number

Warren LS 4

**Plug & Abandon the PC; T&A Lower Mesaverde; Perforate and frac Menefee  
(Upper Mesaverde) and Chacra. Downhole commingle Chacra and Mesaverde  
February 15, 2006**

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**Procedure:**

1. Perform pre-rig site inspection. Check for: size of location, Gas Taps, other wells, other operators, running equipment, wetlands, wash (dikes req.), H2S, barriers needed for equipment, Landowner issues, location of pits (buried lines in pits), Raptor nesting, critical location, check anchors. Check ID wellhead; if earth pit is required have One Call made 48 hours prior to digging.
2. Perform second site visit after lines are marked to ensure all lines clear marked pit locations. Planning and scheduling to ready location for rig.
3. Hold pre-job safety meeting and discuss all JSA's with all BP and third party personnel. The Pre-job safety meeting should cover: heavy lifts, pinch points, location hazards, pressure hazards, and proper PPE
4. RU slickline unit. Tag for fill. Pressure test lubricator and equipment. RIH and set **two** barriers (CIBP, tbg collar stop w/plug, or plug set in nipple) for isolation in tubing string.
5. Check and record tubing, casing, and bradenhead pressures. Ensure production casing has double casing valves installed. Double valve all casing strings.
6. MIRU workover rig. LOTO all necessary equipment including but not limited to: meter run, automation, separator, and water line.
7. Blow down wellhead. Kill with 2% KCL water ONLY if necessary.
8. 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.**
9. Nipple down WH. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi above BHP.
10. TOH and LD old 2-3/8" production tubing.
11. RU wireline and set 5-1/2" composite BP @ 2600' in 5-1/2" liner.
12. RIH with workstring to set cement plug. Cement squeeze PC interval from 2400'-2600'. This will put cement across the Picture Cliff perforated interval. TOH. WOC.
13. Drill out PC cement plug and composite BP with mill for 7-5/8" CSA to 2570'. Just above 5-1/2" liner top at 2574'.
14. Pressure test casing to ensure PC plug integrity. If casing doesn't pass pressure test RIH with Retrievable plug and find hole in casing. Call production engineer if casing squeezes are necessary.

## Warren LS 4

15. RIH with mill for 5-1/2" liner and finish drilling out PC cement plug and composite BP to 2600'.
16. Rig up air package unit and C/O to PBTD @ 4820'. Blow well dry. RD air unit MO.
17. TIH w/ scraper for 5-1/2". Check the distance between the top of the blind rams and the length of the bottom hole assembly that is being run. If the BHA is too long then the well has to be top killed and monitored prior to opening blind rams. RIH to PBTD at 4,820'. POOH.
18. Tubing set bridge plug at 4,600'. Fill casing w/ 2%KCl from the bottom up and test to 2,500 psi w/ rig pumps.
19. RU E-line equipment. Pressure test lubricator and equipment. Log well w/ CBL from CIBP to 2570. If TOC is below 2880', contact engineer to discuss need for remedial cement squeeze.
20. Log well w/ RST from CIBP to 3000'. Send to Houston in order to pick perf intervals.
21. TIH w/ workstring and blow well dry.
22. Prepare for explosive operations. Follow Schlumberger Explosive SOP including radio silence, suspension of welding operations, and isolation of electrical devices from the work area. Perform Pre-job Safety Meeting to review JSA and procedures. Meeting should address the VDR (vehicle data recorder) System that Bp people have installed on their vehicles. They must be shut off at the 300 foot sign by hitting 00 and then the enter button, and then wait for about 5 minutes for the unit to turn off. When the green light goes out, call the control center at 326-9475. This number is on a pickup list in the Optimizer room and should be your first point of contact followed by the front desk then the weekend pager. Verify the unit is not transmitting. You then can drive to location and park, but do not to exceed 10 Miles/hr. Note: 20 MPH will turn unit back on. If someone has On Star on their vehicle they cannot enter closer than 300 foot. On Star cannot be turned off. PLEASE take special caution. This is in conjunction with all cell phones, pagers, radios and any electronic device that transmits a signal.
23. RIH with 3-1/8" casing guns w/lubricator. Perforate Menefee formation: **w/ 2 SPF**
24. RIH with 3-1/2" string and packer. Set packer at +/-2600'
25. NU Frac isolation equipment. Install and monitor production casing and treating pressure during entire job in frac van via pressure transducers on production casing and treating line. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger schedule. Maintain surface pressures less than 3,000 psi during frac job. Flush frac with foam. Fill out GWSI scorecard.
26. Flowback frac immediately. Flow well through choke manifold on 1/4", 1/2" and 3/4" chokes increasing drawdown until well dies or stabilizes. This is to aid in reducing sand flowback. Recommend 8 hours of flow for each choke size.
27. TOH w/ 3-1/2" string and packer.

## Warren LS 4

28. Set BP at +/- 4300' to isolate the MV formation.
29. Prepare for explosive operations. Follow Schlumberger Explosive SOP including radio silence, suspension of welding operations, and isolation of electrical devices from the work area. Perform Pre-job Safety Meeting to review JSA and procedures. Meeting should address the VDR (vehicle data recorder) System that Bp people have installed on their vehicles. They must be shut off at the 300 foot sign by hitting 00 and then the enter button, and then wait for about 5 minutes for the unit to turn off. When the green light goes out, call the control center at 326-9475. This number is on a pickup list in the Optimizer room and should be your first point of contact followed by the front desk then the weekend pager. Verify the unit is not transmitting. You then can drive to location and park, but do not to exceed 10 Miles/hr. Note: 20 MPH will turn unit back on. If someone has On Star on their vehicle they cannot enter closer than 300 foot. On Star cannot be turned off. PLEASE take special caution. This is in conjunction with all cell phones, pagers, radios and any electronic devise that transmits a signal.
30. RIH with 3-1/8" casing guns w/lubricator. Perforate Chacra formation: **w/ 2 SPF**
31. RIH with 3-1/2" string and packer. Set packer at +/-2600'
32. NU Frac isolation equipment. Install and monitor production casing and treating pressure during entire job in frac van via pressure transducers on production casing and treating line. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger schedule. Maintain surface pressures les than 3,000 psi during frac job. Flush frac with foam.
33. Flowback frac immediately. Flow well through choke manifold on 1/4", 1/2" and 3/4" chokes increasing drawdown until well dies or stabilizes. This is to aid in reducing sand flowback. Recommend 8 hours of flow for each choke size.
34. Rig up air package/unit, pressure test all lines (Testing procedure to be supplied from air company), TIH with tubing and bit for 5-1/2" casing. Cleanout fill to top of BP set at 4,300'. **Perform well test on Chacra and document well test in DIMS.**
35. Cleanout fill and BP set at 4,300' and BP set at 4600'. Cleanout to PBTD at 4,820'. Blow well dry.
36. Rabbit tubing and RIH with 2-3/8" production tubing (with muleshoe, F-nipple with plug, 4 ft pup, X-nipple with plug).
37. Land 2-3/8" production tubing at +/-4,600'. Lock down hanger.
38. 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 wellhead and installation of BOP's will be performed under a dispensation for one (1) barrier on the backside.**
39. 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.

## **Warren LS 4**

40. RU WL unit. Run gauge ring for 2-3/8" tubing. Pull plugs and set tubing stop for plunger. Communicate plunger equipment status to IC room personnel.
41. RD slickline unit.
42. Test well for air. Return well to production and downhole co-mingle Chacra and Mesaverde.

# Warren LS 4

## Warren LS #4

Sec 14, T28N, R9W

API # 30-045-07470

GL: 6091'

### History:

Completed as DK/PC dual in July 1957

Downhole commingled in 1985

Tubing replaced 11/02

### Pictured Cliffs Perforations

2554' - 2590' w/ 40,000#'s sand

Liner top sqz'd w/ 100 sxs cmt

### Mesaverde Perforations

PL/MF: 4642' - 4810' w/ 60,000#'s sand

PBTD: 4820'

### NOTES:

est TOC @ surface (circ)

10-3/4" 32# Armco SW @ 174'

150 sxs cmt (circulated)

Est. TOC @ 1400' (temp surv)

5-1/2" Burnes hanger @ 2574'

7-5/8" 26#, J55 @ 2618'

250 sxs cmt

Est. TOC @ TOL (temp surv)

Tubing: 2-3/8" 4.7#, J55 8rd @ 4775'

5-1/2" liner, 15.5#, J55 @ 4922'

300 sxs cmt

updated: 2/13/06 JG

## **Bureau of Land Management Conditions of Approval:**

- 1) If cement squeeze work is necessary, contact Matt Halbert of the BLM Farmington Field Office @ (505) 599-6350.**
- 2) Pits must be lined with an impervious material at least 12 mils thick. The pit must be fenced on three (3) sides during workover operations and on the 4<sup>th</sup> side after the rig moves off location. Pits must be closed within 90 days of completion of the workover operations. Prior to closing the pit the liner must be cut off at mud level.**