

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF 078319 - A	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator BP AMERICA PRODUCTION COMPANY		7. If Unit or CA Agreement, Name and No.	
Contact: MARY CORLEY E-Mail: corley@bp.com		8. Lease Name and Well No. BARRETT LS 1C	
3a. Address P.O. BOX 3092 HOUSTON, TX 77253		9. API Well No. 30-045-31037	
3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700		10. Field and Pool, or Exploratory BLANCO MESAVERDE	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENW Lot 6 190FNL 810FWL 36.52600 N Lat, 107.49500 W Lon At proposed prod. zone NENW Lot 6 190FNL 1040FWL 36.52600 N Lat, 107.49500 W Lon		11. Sec., T., R., M., or Blk. and Survey or Area C Sec 30 T31N R9W Mer NMP	
14. Distance in miles and direction from nearest town or post office* 12 MILES FROM AZTEC, NEW MEXICO		12. County or Parish SAN JUAN	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 810		13. State NM	
16. No. of Acres in Lease 309.09		17. Spacing Unit dedicated to this well 309.09	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.		19. Proposed Depth 5999 MD 5981 TVD	
20. BLM/BIA Bond No. on file		21. Elevations (Show whether DF, KB, RT, GL, etc.) 6538 GL	
22. Approximate date work will start 04/20/2002		23. Estimated duration 6 DAYS	
24. Attachments		This action is subject to technical and procedural review pursuant to 43 CFR 3165.3, and appeal pursuant to 43 CFR 3165.4.	
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:			
1. Well plat certified by a registered surveyor.		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).	
2. A Drilling Plan.		5. Operator certification	
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).		6. Such other site specific information and/or plans as may be required by the authorized officer.	
25. Signature (Electronic Submission)		Name (Printed/Typed) MARY CORLEY	
Date 03/19/2002		Title AUTHORIZED REPRESENTATIVE	
Approved by (Signature)		Name (Printed/Typed) Chip Harraden	
Date 5/16/02		Title Geologist PMT	
Office BLM FFO		Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	
Conditions of approval, if any, are attached.			
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.			

Additional Operator Remarks (see next page)

Electronic Submission #10826 verified by the BLM Well Information System  
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

HOLD C104 FOR Directional Survey

\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\*

NMOC

District I  
PO Box 1980, Hobbs NM 88241-1980  
District II  
PO Drawer KK, Artesia, NM 87211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-31037		<sup>2</sup> Pool Code 72319		<sup>3</sup> Pool Name BLANCO MESA VERDE	
<sup>4</sup> Property Code 000305		<sup>5</sup> Property Name Barrett LS			<sup>6</sup> Well Number # 1C
<sup>7</sup> OGRID No. 000778		<sup>8</sup> Operator Name BP AMERICA PRODUCTION COMPANY			<sup>9</sup> Elevation 6538

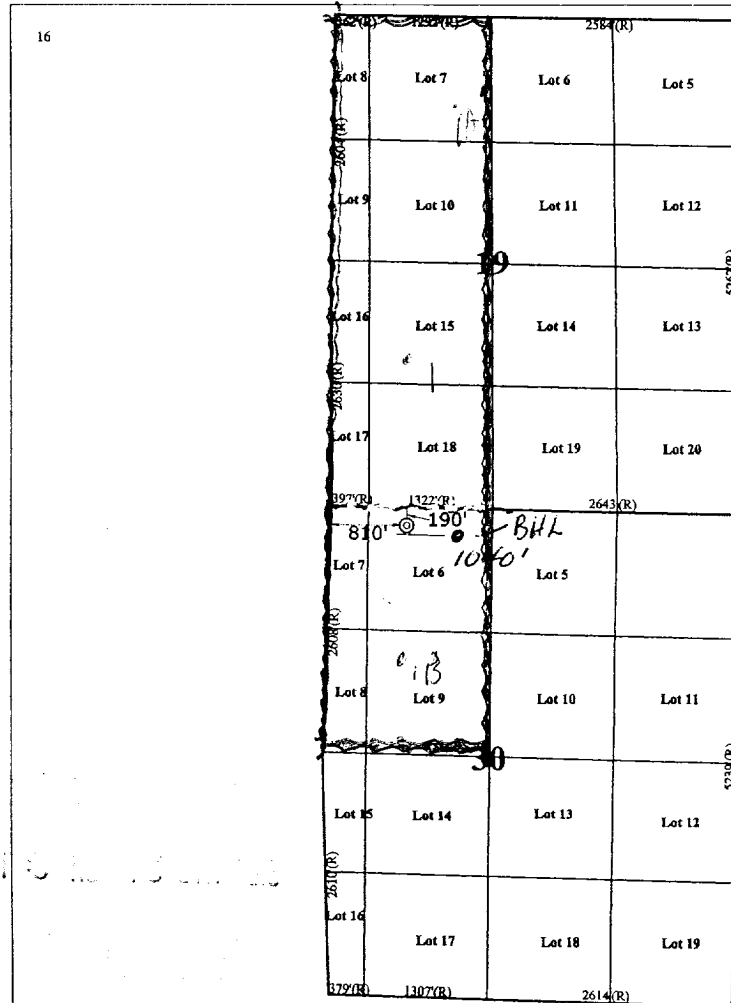
<sup>10</sup> Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C (Lot 6)	30	31 N	9 W		190	NORTH	810	WEST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

<sup>7</sup> UL or lot no. 6	<sup>8</sup> Section 30	<sup>9</sup> Township 31N	<sup>10</sup> Range 9W	<sup>11</sup> Lot Idn	<sup>12</sup> Feet from the 190	<sup>13</sup> North/South line NORTH	<sup>14</sup> Feet from the 1040	<sup>15</sup> East/West line West	<sup>16</sup> County SAN JUAN
<sup>17</sup> Dedicated Acres 309.09		<sup>18</sup> Joint or Infill		<sup>19</sup> Consolidation Code		<sup>20</sup> Order No. R-35			

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.

Signature <i>Mary Correy</i>	
Printed Name MARY CORREY	
Title Sr Regulatory Analyst	
Date 03.19.2002	

<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.

March 5, 2002

Date of Survey	
Signature and Seal of Professional Surveyor	
7016	
Certificate Number	



**BP AMERICA PRODUCTION COMPANY  
DRILLING AND COMPLETION PROGRAM**

**Prospect Name:** Barrett LS  
**Lease:** Barrett LS  
**County:** San Juan  
**State:** New Mexico  
**Date:** March 19, 2002

**Well No:** 1C  
**Surface Location:** 30-31N-9W, 190 FNL, 810 FWL  
**Field:** Blanco Mesaverde  
**Bottom Location:** 30-31N-9W, 190FNL, 1040 FWL

**OBJECTIVE:** Drill 50' below the base of the Mancos Shale, set 41/2" production liner, Stimulate LS, CH, MF and PL intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 6538		Estimated KB: 6552	
Rotary	0 - TD				
LOG PROGRAM		MARKER		TVD	MEAS. DEPTH
		Ojo Alamo		1896	1903
		Kirkland		2080	2090
		Fruitland		2772	2790
		Fruitland Coal	*	2976	2994
		Pictured Cliffs	*	3315	3333
		Lewis Shale	#	3500	3518
		Cliff House	#	4824	4842
		Menefee Shale	#	5197	5215
		Point Lookout	#	5576	5594
		Mancos		5931	5949
		TOTAL DEPTH		5981	5999
		# Probable completion interval		* Possible Pay	
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE	DEPTH INVERAL	FREQUENCY	DEPTH	FREQUENCY	DEPTH
None		none	Production hole	Geologist	0-TD
REMARKS:					

MUD PROGRAM:					
Approx. Interval	Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120	Spud	8.6-9.2			
120 - 2944 (1)	Water/LSND	8.6-9.2		<6	
2944 - 5999	Gas/Air/N2/Mist	Volume sufficient to maintain a stable and clean wellbore			

REMARKS:  
 (1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.

CASING PROGRAM: (Normally, tubular goods allocation letter specifies casing sizes to be used. Hole sizes will be governed by Contract)						
Casing String	Estimated Depth	Casing Size	Grade	Weight	Hole Size	Landing Pt, Cmt, Etc.
Surface/Conductor	120	9 5/8"	H-40 ST&C	32#	12.25"	1
Intermediate	2944	7"	J/K-55 ST&C	20#	8.75"	1,2
Production Liner	5999	4 1/2"	J-55	10.5#	6.25"	3,4

REMARKS:  
 (1) Circulate Cement to Surface  
 (2) Set casing 50' above Fruitland Coal  
 (3) Bring cement 100' above 7" shoe  
 (4) 100' Overlap

**CORING PROGRAM:**  
 None

**COMPLETION PROGRAM:**  
 Rigless, 3-4 Stage Limited Entry Hydraulic Frac

**GENERAL REMARKS:**  
 Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.

Form 46 Reviewed by: \_\_\_\_\_ Logging program reviewed by: N/A

<b>PREPARED BY:</b> HGJ/MNP	<b>APPROVED:</b>	<b>DATE:</b> 19 <sup>th</sup> March 2002 Version 1.0
Form 46 12-00 MNP		

## FEDERAL CEMENTING REQUIREMENTS

1. All permeable zones containing fresh water and other usable water containing 10,000 PPM or less total dissolved solids will be isolated and protected from contamination by cement circulated in place for the protection of permeable zones per the NTL-FRA 90-1 Section III A.
2. The hole size will be no smaller than 1 ½" larger diameter than the casing O.D. across all water zones.
3. An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement.
4. An adequate number of casing centralizers will be run through usable water zones to ensure that the casing is centralized through these zones. The adequate number of centralizers to use will be determined by API SPEC 10D.
5. Centralizers will impart a swirling action around the casing and will be used just below and into the base of the lowest usable water zone.
6. A chronological log will be kept recording the pump and slurry information and will be sent to the BLM with the subsequent sundry.

---

### SAN JUAN BASIN Mesaverde Formation Pressure Control Equipment

#### Background

The objective Mesaverde formation maximum surface pressure is anticipated to be less than 1000 PSI, based on shut-in surface pressures from adjacent wells. Pressure control equipment working pressure minimum requirements are therefore 2000 PSI. Equipment to be used will conform to API RP-53 (Figure 2.C.2) for a 2000 PSI system per Federal Onshore Order No. 2. Due to available conventional equipment within the area, 3000 PSI rated pressure control equipment will typically be utilized in a double ram type arrangement. Regional drilling rights to be utilized have substructure height limitations which exclude the use of annular preventers; therefore a rotating head will be installed above these rams. This pressure control equipment will be utilized for conventional drilling below conductor to total depth. No abnormal temperature, pressure, or Hydrogen Sulfide gas is anticipated.

#### Equipment Specification

##### Interval

##### BOP Equipment

Below conductor casing to total depth	11" nominal or 7 1/16", 3000 PSI double ram preventer with rotating head.
---------------------------------------	------------------------------------------------------------------------------

All ram type preventers and related control equipment will be hydraulically tested to 250 PSI (low pressure) and 750 PSI (high pressure), upon installation, following any repairs or equipment replacements, or at 30 day intervals. Accessories to BOP equipment will include Kelly cock, upper Kelly cock with a handle available, floor safety valves and choke manifold which will also be tested to equivalent pressure at the appropriate intervals