

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 - 078336-B
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 Contact: MARY CORLEY E-Mail: corley@m@bp.com		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. BOX 3092 HOUSTON, TX 77253		8. Lease Name and Well No. BARRETT LS 4B
3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700		9. API Well No. 30-045-31034
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSE Lot 10 2145FSL 1365FEL 36.52900 N Lat, 107.47900 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BLANCO MESAVERDE
14. Distance in miles and direction from nearest town or post office* 15 MILES FROM AZTEC		11. Sec., T., R., M., or Blk. and Survey or Area J Sec 20 T31N R9W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1365	16. No. of Acres in Lease 320.71	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 5769 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6241 GL	22. Approximate date work will start 04/12/2002	17. Spacing Unit dedicated to this well 320.71 E/2
23. Estimated duration 7 DAYS		

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

24. Attachments

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
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).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
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 03/11/2002
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) David J. Mankiewicz	Name (Printed/Typed)	Date 4/25/02
Title AFM	Office 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 #10732 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **

NMCCD

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

¹ API Number 30-045-31034	² Pool Code 72319	³ Pool Name BLANCO MESA VERDE
⁴ Property Code 000305	⁵ Property Name Barrett LS	⁶ Well Number #4B
⁷ OGRID No. 000778	⁸ Operator Name BP AMERICA PRODUCTION COMPANY	⁹ Elevation 6241

¹⁰ Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J (Lot 10)	20	31 N	9 W		2145	SOUTH	1365	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

¹ UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320.71	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

¹⁶	Lot 4	Lot 3	Lot 2	Lot 1	¹⁷ 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 Orley</i> Printed Name: Mary Orley Title: Sr. Regulatory Analyst Date: 03.11.02
	Lot 5	Lot 6	Lot 7	Lot 8	
	Lot 12	Lot 11	Lot 10	Lot 9	
	Lot 13	Lot 14	Lot 15	Lot 16	

5289 (R)

5291 (R)

5262 (R)

5242 (R)

20

1365'

2145'

¹⁸ 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.
February 26, 2002
Date of Survey
Signature and Seal of Professional Surveyor
GARY W. KENN
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
7016
7016
Certificate Number

**AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM**

Prospect Name: Barrett LS
Lease: Barrett LS
County: San Juan
State: New Mexico
Date: March 11, 2002

Well No: 4B
Surface Location: 20-31N-9W, 2145 FSL, 1865 FEL
Field: Blanco Mesaverde

OBJECTIVE: Drill 50' below the base of the Mancos Shale, set 4 1/2" 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: 6231		Estimated KB: 6245	
Rotary	0 - TD	MARKER		SUBSEA	TVD
LOG PROGRAM		Ojo Alamo		4600	1645
		Kirkland		4462	1783
		Fruitland		3564	2681
		Fruitland Coal	*	3389	2856
		Pictured Cliffs	*	3169	3076
		Lewis Shale	#	3017	3228
		Cliff House	#	1665	4580
		Menefee Shale	#	1293	4952
		Point Lookout	#	940	5305
		Mancos		526	5719
		Greenhorn			
		Bentonite Marker			
		Two Wells	#		
		Dakota MB	#		
		Burro Canyon	*		
		Morrison	*		
		TOTAL DEPTH		476	5769
		# Probable completion interval		* Possible Pay	
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
		FREQUENCY	DEPTH	FREQUENCY	DEPTH
TYPE					
None		None	Production hole	Geolograph	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 - 2806 (1)	Water/LSND	8.6-9.2		<6	
2806 - 5769	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.
(2) Mud up 50' above Morrison +/-.

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	2806	7"	J/K-55 ST&C	20#	8.75"	1, 2
Production Liner	5769	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/NMOCDD 24 hours prior to Spud, BOP testing, and Casing and Cementing.

Form 46 Reviewed by: _____ Logging program reviewed by: N/A

PREPARED BY:	APPROVED:	DATE:	
HGJ/MNP		7 th 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