

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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. SF - 078039
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" 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: corleym@bp.com		8. Lease Name and Well No. BARNES A 18M
3a. Address P.O. BOX 3092 HOUSTON, TX 77253	3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700	9. API Well No. 30045 31740
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNE Lot B 955FNL 2400FEL 36.57600 N Lat, 107.58600 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BASIN DAKOTA/BLANCO MESAVERDE
14. Distance in miles and direction from nearest town or post office* 16 MILES TO AZTEC, NEW MEXICO		11. Sec., T., R., M., or Blk. and Survey or Area Sec 27 T32N R11W Mer NMP B
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 955	16. No. of Acres in Lease 320.00	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1300	19. Proposed Depth 7900 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6505 GL	22. Approximate date work will start 09/01/2003	17. Spacing Unit dedicated to this well 320.00 N/A
23. Estimated duration 7 DAYS		20. BLM/BIA Bond No. on file WY2924
24. Attachments		

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 06/25/2003
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) /s/ David J. Mankiewicz	Name (Printed/Typed)	Date JUL 14 2003
Title		Office

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 #23656 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the FarmingtonThis action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

NWOC

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 30-045-31740		2 Pool Code 71599 12319		3 Pool Name BASIN DAKOTA & BLANCO MESAVERDE		
4 Property Code 000293		5 Property Name Barnes A			6 Well Number # 18M	
7 OGRID No. 000118		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 6505	

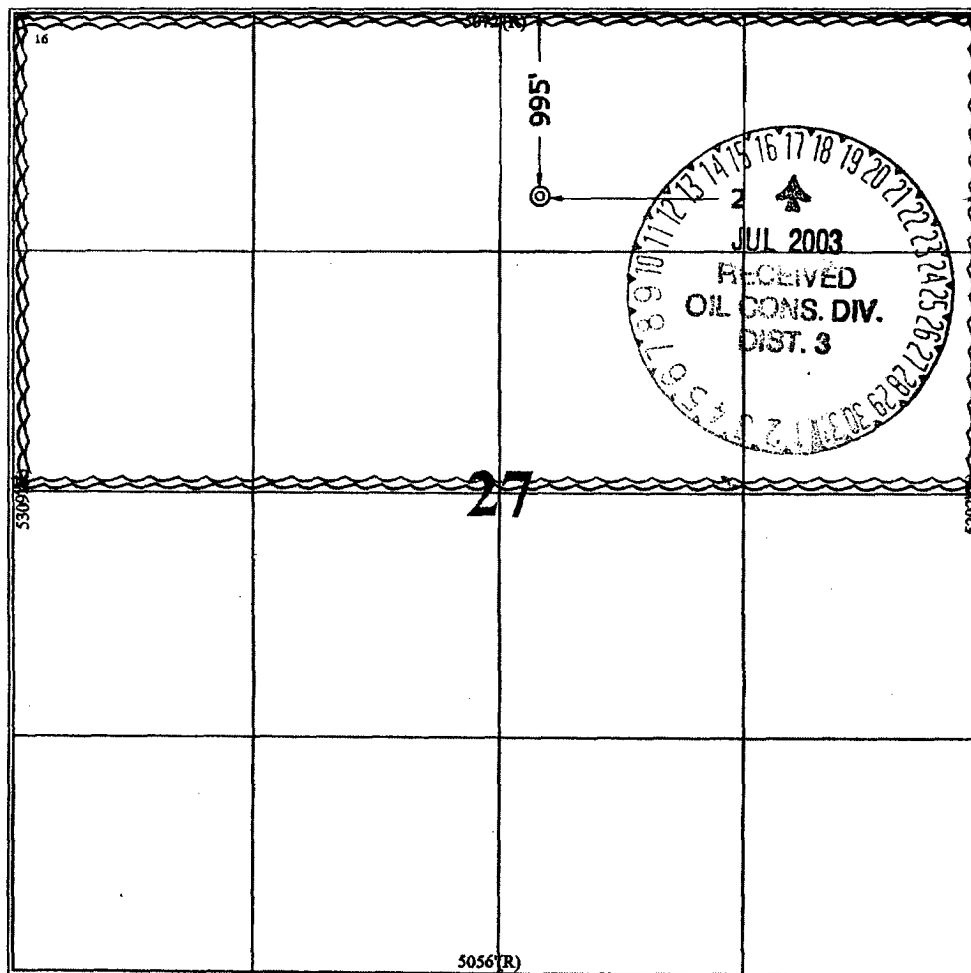
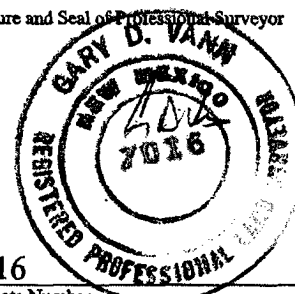
10 Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	27	32 N	11 W		995	NORTH	2400	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

7 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 3.20		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

	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Mary Corley</i> Signature MARY CORLEY Printed Name SR Regulatory Analyst Title 06-25-2003 Date</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>May 28, 2003 Date of Survey Signature and Seal of Professional Surveyor  7016 Certificate Number</p>

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

Prospect Name: Barnes A
Lease: Barnes A
County: San Juan
State: New Mexico
Date: June 6, 2003

Well No: 18M
Surface Location: 27-32N-11W, 995 FNL, 2400 FEL
Field: Blanco Mesaverde/Basin Dakota

OBJECTIVE: Drill 210' below the top of the Upper Two Wells (DKOT), set 4 1/2" production casing, Stimulate CH, MF, PL and DK intervals							
METHOD OF DRILLING				APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS		DEPTH OF DRILLING		Estimated GL: 6505		Estimated KB: 6519	
Rotary		0 - TD					
LOG PROGRAM							
TYPE		DEPTH INTERVAL		MARKER		SUBSEA	
<u>OPEN HOLE</u>						TVD.	
none							
<u>CASED HOLE</u>							
GR-CCL-TDT		TDT - TD to 7" shoe					
CBL		Identify 4 1/2" cement top					
REMARKS: - Please report any flares (magnitude & duration).				Ojo Alamo		4547' 1972'	
				Kirkland		4342' 2177'	
				Fruitland		3894' 2625'	
				Fruitland Coal		3681' 2838'	
				Pictured Cliffs		3265' 3254'	
				Lewis Shale		3090' 3429'	
				Cliff House		1756' 4763'	
				Menefee Shale		1358' 5161'	
				Point Lookout		998' 5521'	
				Mancos		661' 5858'	
Greenhorn		-1052' 7571'					
Bentonite Marker		-1102' 7621'					
Two Wells		# -1171' 7690'					
Paguete		# -1246' 7765'					
Cubero Upper		# -1287' 7806'					
Cubero Lower		# -1317' 7836'					
TOTAL DEPTH				-1381'		7900'	
				# Probable completion interval		* Possible Pay	
SPECIAL TESTS				DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE				FREQUENCY DEPTH		FREQUENCY DEPTH	
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 - 200		Spud	8.6-9.2				
200 - 3529 (1)		Water/LSND	8.6-9.2		<6		
3529 - 7900		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#	13.5"	1	
Intermediate 1	3529	7"	J/K-55 ST&C	20#	8.75"	1,2	
Production	7900	4 1/2"	J-55	11.6#	6.25"	3	
REMARKS:							
(1) Circulate Cement to Surface							
(2) Set casing 100' into Lewis Shale							
(3) Bring cement 100' above 7" shoe							
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			
PREPARED BY:		APPROVED:		DATE:			
HGJ/MNP/JMP				June 6, 2003			
Form 46 12-00 MNP				Version 4.0			

BP America Production Company

BOP Pressure Testing Requirements

Well Name: Barnes A
County: San Juan

18M
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1972		
Fruitland Coal	2838		
PC	3254		
Lewis Shale	3429		
Cliff House	4763	500	0
Menefee Shale	5161		
Point Lookout	5521	600	0
Mancos	5858		
Dakota	7690	2600	1449

** Note: Determined using the following formula: $ABHP - (.22 \times TVD) = ASP$

Requested BOP Pressure Test Exception: 1500 psi

**SAN JUAN BASIN
Dakota Formation
Pressure Control Equipment**

Background

The objective Dakota 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 in the Basin Dakota. No abnormal temperature, pressure, or H2S 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 2000 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.