

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. SF - 078049
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: corleyml@bp.com		8. Lease Name and Well No. HUGHES A 4M
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. 30 045 31415
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWNE Lot G 2525FNL 1960FEL 36.41000 N Lat, 107.39700 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* 22 MILES FROM BLOOMFIELD, NEW MEXICO	16. No. of Acres in Lease 320.00	11. Sec., T., R., M., or Blk. and Survey or Area Sec 34 T29N R8W Mer NMP G
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660	17. Spacing Unit dedicated to this well 320.00 E/2	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 900	19. Proposed Depth 7553 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6501 GL	22. Approximate date work will start 03/08/2003	20. BLM/BIA Bond No. on file WY2924
		23. Estimated duration 7 DAYS

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 01/23/2003
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) /s/ David J. Monkiewicz	Name (Printed/Typed)	Date
Title	Office	FEB 24 2003

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 #17909 verified by the BLM Well Information System  
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

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

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

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

NMOCd

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 <b>30-045-31415</b>		2 Pool Code <b>72319 &amp; 71599</b>		3 Pool Name <b>Basin Dakota &amp; Blanco Mesa Verde</b>		
4 Property Code <b>000701</b>		5 Property Name <b>Hughes A</b>			6 Well Number <b># 4M</b>	
7 OGRID No. <b>000778</b>		8 Operator Name <b>BP AMERICA PRODUCTION COMPANY</b>			9 Elevation <b>6501</b>	

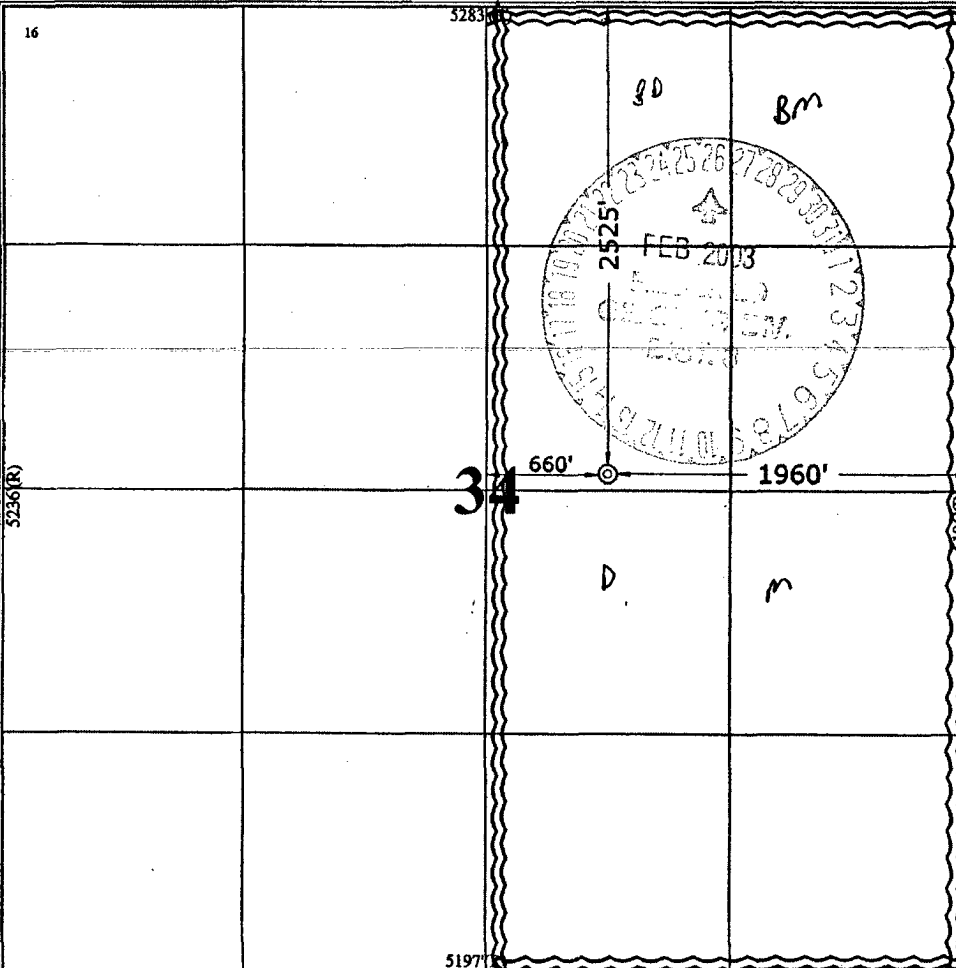
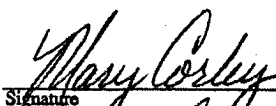
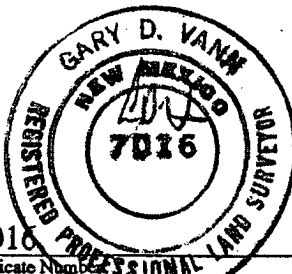
**10 Surface Location**

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>G</b>	<b>34</b>	<b>29 N</b>	<b>8 W</b>		<b>2525</b>	<b>NORTH</b>	<b>1960</b>	<b>EAST</b>	<b>SAN JUAN</b>

**11 Bottom Hole Location If Different From Surface**

12 UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
13 Dedicated Acres <b>320</b>		14 Joint or Infill		15 Consolidation Code		16 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

	<b>17 OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.   Signature <b>MARY CORLEY</b> Printed Name <b>SR. REGULATORY ANALYST</b> Title <b>01-20-2003</b> Date
	<b>18 SURVEYOR CERTIFICATION</b> 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>December 11, 2002</b> Date of Survey  Signature and Seal of Professional Surveyor   <b>7016</b> Certificate Number

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

**Prospect Name:** Hughes A  
**Lease:** Hughes A  
**County:** San Juan  
**State:** New Mexico  
**Date:** December 17, 2002

**Well No:** 4M  
**Surface Location:** 34-29N-8W, 2525 FNL, 1960 FEL  
**Field:** Blanco Mesaverde/Basin Dakota

**OBJECTIVE:** Drill 50' below the top of the Lower Cubero (DKOT Mbr.), set 4 1/2" production casing, Stimulate CH, MF, PL and DKOT intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 6501'		Estimated KB: 6515'	
Rotary	0 - TD	<b>MARKER</b>		<b>SUBSEA</b>	<b>TVD</b>
<b>LOG PROGRAM</b>		Ojo Alamo		4452'	2063'
<b>TYPE</b>	<b>DEPTH INTERVAL</b>	Kirtland		4300'	2215'
<u>OPEN HOLE</u>		Fruitland		3910'	2605'
None		Fruitland Coal	*	3679'	2836'
		Pictured Cliffs	*	3448'	3067'
		Lewis	#	3246'	3269'
<u>CASED HOLE</u>		Cliff House	#	1944'	4571'
GR-CCL-TDT	TDT - TD to 7" shoe	Menefee	#	1679'	4836'
CBL	Identify 4 1/2" cement top	Point Lookout	#	1244'	5271'
<b>REMARKS:</b>		Mancos		803'	5713'
- Please report any flares (magnitude & duration).		Greenhorn		-718'	7233'
		Graneros		-781'	7296'
		DKOT/Two Wells	#	-825'	7340'
		Paguate	#	-923'	7438'
		U. Cubero	#	-962'	7477'
		L. Cubero	#	-988'	7503'
		<b>TOTAL DEPTH</b>		-1038'	7553'
<b>Special Tests</b>		# Probable completion interval		* Possible Pay	
<b>Tests: none</b>		<b>DRILL CUTTING SAMPLES</b>		<b>DRILLING TIME</b>	
<b>Remarks</b>		Frequency	Depth	Frequency	Depth
		None	Production hole	Geolograph	0-TD

MUD PROGRAM:						
Approx. Interval		Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification
0	- 200	Spud	8.6-9.2			
200	- 3369	Water/LSND	8.6-9.2		<6	
3369	- 7553	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	200	9 5/8"	H-40 ST&C	32#	13.5"	1
Intermediate 1	3369	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	7553	4 1/2"	J-55	11.6#	6.25"	3,4

**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/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/JMP		December 17, 2002	
		Version 1.0	

# BP America Production Company

## BOP Pressure Testing Requirements

Well Name: Hughes A  
County: San Juan

4M  
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	2062'		
Fruitland Coal	2836'		
PC	3067'		
Lewis Shale	3269'		
Cliff House	4571'	500	0
Menefee Shale	4836'		
Point Lookout	5271'	600	0
Mancos	5713'		
Dakota	7340'	2600	1400

\*\* 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

Below conductor casing to total depth

#### BOP Equipment

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