

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF - 078387-A
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well Gas <input type="checkbox"/> Other <input checked="" 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 Attn: Mary Corley		7. If Unit or CA Agreement, Name and No
3a. Address P.O. Box 3092 Houston, Texas 77253	3b. Phone No. (include area code) 281-366-4491	8. Lease Name and Well No. Fletcher 2M
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2070' FNL & 660' FEL At proposed prod. Zone		9. API Well No. 31937 30-045-20706
10. Field and Pool, or Exploratory Basin Dakota & Blanco Mesaverde		11. Sec., T., R., M., or Blk, and survey or Area # Unit H Sec. 29, T31N, R08W
14. Distance in miles and direction from nearest town or post office* 24 miles from Aztec, NM	12. County or Parish San Juan	13. State New Mexico
15. Distance from proposed* Location to nearest Property or lease line, ft. (Also to nearest drig. Ujnit line, if any) 660'	16. No. of Acres in lease 320	17. Spacing Unit dedicated to this well 320 E/2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1100'	19. Proposed Depth 8025'	20. BLM/BIA Bond No. on file WY2924
21. Elevations (show whether DF, KDB., RT, GL, etc.) 6515' GL	22. Approximate date work will start* December 05, 2003	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 <i>Mary Corley</i>	Name (Printed/typed) Mary Corley	Date 10/02/2003
Title Senior Regulatory Analyst		
Approved by /s/ David J. Markiewicz	Name (Printed/Typed)	Date FEB 24 2004
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.

*(Instructions on reverse)

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

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

¹ API Number 30-045-31937	² Pool Code 71599-72319	³ Pool Name BASIN DARTA - BLANCO MESAVARDE
⁴ Property Code 000 517	⁵ Property Name Fletcher	⁶ Well Number # 2M
⁷ OGRID No. 000 778	⁸ Operator Name BP AMOCO PRODUCTION COMPANY	⁹ Elevation 6515

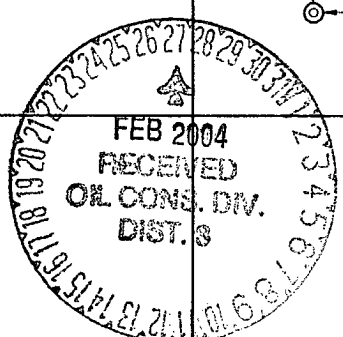
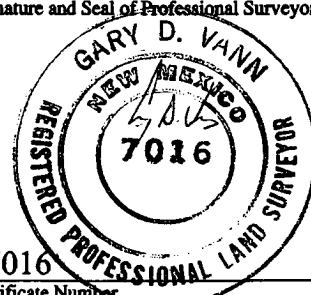
¹⁰ Surface Location

UL or Lot No. H	Section 29	Township 31 N	Range 8 W	Lot Idn	Feet from the 2070	North/South line NORTH	Feet from the 660	East/West line EAST	County SAN JUAN
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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 320	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 5302(R) 5401(R)		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 Corley</i> Printed Name: Mary Corley Title: Sr. Regulatory Analyst Date: 10-02-2003
		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. Date of Survey: March 23, 2001 Signature and Seal of Professional Surveyor:  Certificate Number: 7016

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

Prospect Name: Fletcher
Lease: Fletcher
County: San Juan
State: New Mexico
Date: October 1, 2003

Well No: 2M
Surface Location: 29-31N-8W, 2070 FNL, 660 FEL
Field: Blanco Mesaverde/Basin Dakota

OBJECTIVE: Drill 210' below the top of the Two Wells (DKOT), set 4.5" production casing across Dakota, Stimulate CH, MF, PL and DK intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 6515'		Estimated KB: 6529'	
Rotary	0 - TD				
LOG PROGRAM					
TYPE	DEPTH INVERAL				
<u>OPEN HOLE</u>					
<u>CASED HOLE</u>					
GR-CCL-TDT	TDT – TD to 7" shoe				
CBL	Identify 4.5" cement top				
REMARKS:					
- Please report any flares (magnitude & duration).					

MUD PROGRAM:

Approx. Interval	Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120	Spud	8.6-9.2			
120 - 3921 (1)	Water/LSND	8.6-9.2			
3921 - 8025	Gas/Air/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	3921	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	8025	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/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:

October 1, 2003

KAS/MNP/JMP

Version 1.0

Form 46 12-00 MNP

BP America Production Company

BOP Pressure Testing Requirements

Well Name: Fletcher
County: San Juan

2M
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	2219		
Fruitland Coal	3163		
PC	3415		
Lewis Shale	3821		
Cliff House	4950	500	0
Menefee Shale	5319		
Point Lookout	5652	600	0
Mancos	6027		
Dakota	7815	2600	1500

** 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.

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.

~~BP is currently using 3% CaCl₂ in our slurry and achieves 300 psi compressive strength after 1 hr 50 min and 500 psi after 3 hrs 8 min. We, therefore, request approval to initiate blowout preventer (BOP) nipple up operations after a 2 hour wait on cement time in lieu of the 6 hour time frame required by rule to achieve 300 psi compressive strength with Class B cement slurry at 80 deg F.~~

See BLM General Requirements