Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANGEMENT
APPLICATION OFOR PERMIT TO DRILL OR REENETER

FEB 2004

RECEIVED
070 FARMINGTON NM

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

5. Lease Serial No. **SF – 078387-A**

6. If Indian, Allottee or tribe Name

7. If Unit or CA Agreement, Name and No

1a. Type of Work: [X] DRILL [ ] REENTER

1b. Type of Well: [ ] Oil Well [X] Gas Well Gas [ ] Other [ ] Single Zone [X] Multiple Zone

8. Lease Name and Well No.
Fletcher 1M

2. Name of Operator
BP America Production Company Attn: Mary Corley

9. API Well No. 3004531948
~~30-045-30767~~

3a. Address
P.O. Box 3092 Houston, Texas 77253

3b. Phone No. *(include area code)*
281-366-4491

10. Field and Pool, or Exploratory
Basin Dakota & Blanco Mesaverde

4. Loction of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface **2310' FNL & 1540' FWL Unit H**

At proposed prod. Zone

11. Sec., T., R., M., or Blk, and survey or Area
F **Sec. 33, T31N, R08W**

14. Distance in miles and direction from nearest town or post office*
22 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) **1100'**

16. No. of Acres in lease
320

17. Spacing Unit dedicated to this well
320 W/2

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **1400'**

19. Proposed Depth
7930'

20. BLM/BIA Bond No. on file
WY2924

21. Elevations (show whether DF, KDB., RT, GL, etc.
6447' 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.
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 Mary Corley | Name *(Printed/typed)* **Mary Corley** | Date **10/06/2003**

Title **Senior Regulatory Analyst**

Approved by (Signature) /s/ David J. Mankiewicz | 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

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	[2] Pool Code	[3] Pool Name
30-045-31948	71599 / 72319	BASIN DAKOTA / BLANCO MESAVERDE

[4] Property Code	[5] Property Name	[6] Well Number
000517	Fletcher	# 1M

[7] OGRID No.	[8] Operator Name	[9] Elevation
000778	AMOCO PRODUCTION COMPANY	6447

[10] Surface Location

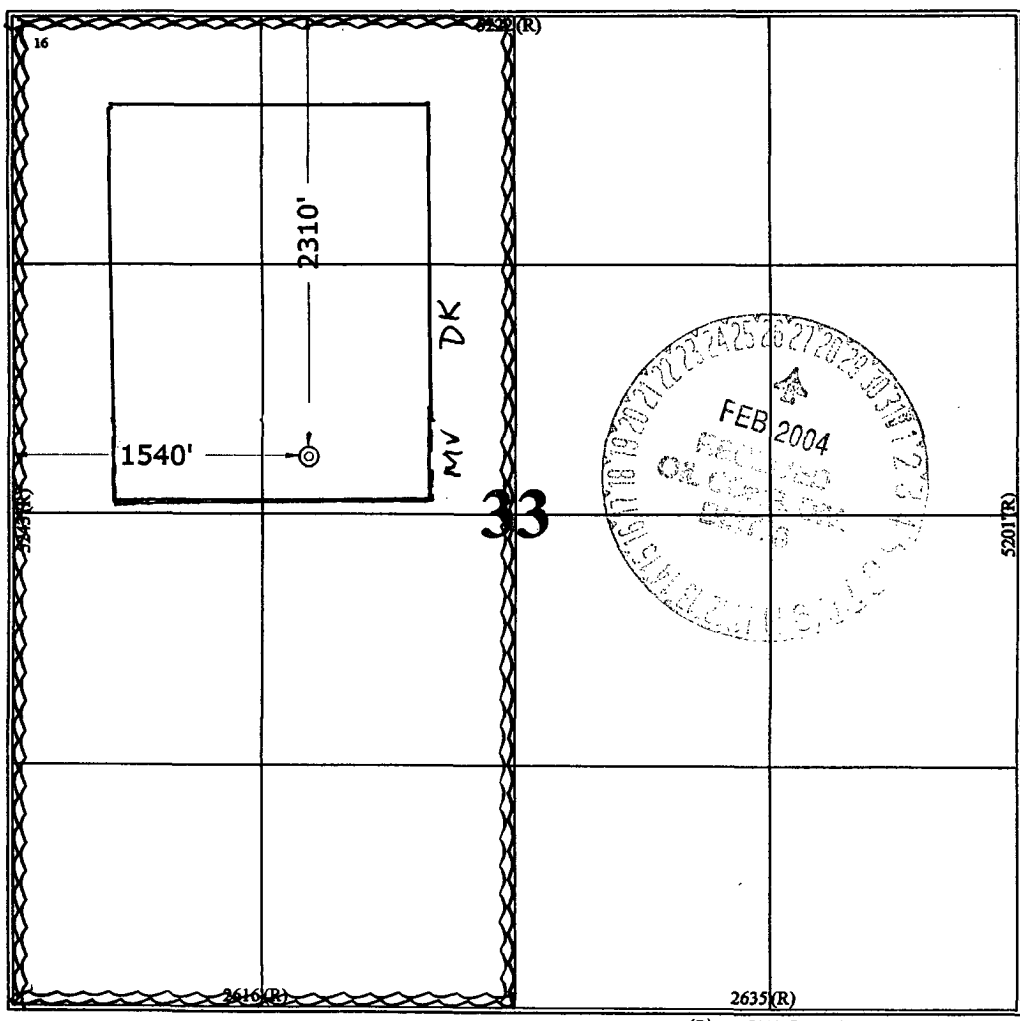
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	33	31 N	8 W		2310	NORTH	1540	WEST	SAN JUAN

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: Mary Corley

Printed Name: Mary Corley

Title: Sr. Regulatory Analyst

Date: 1-27-01

[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.

May 14, 2001

Date of Survey

Signature and Seal of Professional Surveyor

GARY D. VANN
NEW MEXICO
7016
REGISTERED PROFESSIONAL LAND SURVEYOR

7016

Certificate Number

(R) – BLM Record

AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM

Prospect Name: Fletcher
Lease: FLETCHER
County: San Juan
State: New Mexico
Date: October 6, 2003

Well No: 1M
Surface Location: 33-31N-8W, 2310 FNL,1540 FWL
Field: Blanco Mesaverde/Basin Dakota

OBJECTIVE: Drill 450' below the base of the Greenhorn Limestone, set 41/2" production casing, Stimulate LS, CH, MF, PL and DK intervals

METHOD OF DRILLING

TYPE OF TOOLS	DEPTH OF DRILLING
Rotary	0 - TD

LOG PROGRAM

TYPE	DEPTH INVERAL
OPEN HOLE	
GR-Induction	TD to 7" shoe
Density/Neutron	TD to 7" shoe
CASED HOLE	
GR-CCL-TDT	TDT – TD to 7" shoe
CBL	Identify 4 ½" cement top

REMARKS:
- Please report any flares (magnitude & duration).

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Estimated GL: 6447 Estimated KB: 6461

MARKER		SUBSEA	MEAS. DEPTH
Ojo Alamo		4387.1	2074
Fruitland Coal	*	3691.3	2563
Pictured Cliffs	*	3189.1	3272
Lewis Shale	#	2861	3600
Cliff House	#	1440.2	5021
Menefee Shale	#	1239.1	5222
Point Lookout	#	926.6	5534
Mancos		546.4	5915
Greenhorn		-1102.5	7564
Bentonite Marker		-1149.4	7610
Two Wells	#	-1221.3	7682
Dakota MB	#	-1308.8	7770
Burro Canyon	*	-1506.2	7967
Morrison	*	-1556.2	8017
TOTAL DEPTH		-1599	8060

Probable completion interval * Possible Pay

SPECIAL TESTS

TYPE
None

REMARKS:

DRILL CUTTING SAMPLES

FREQUENCY	DEPTH
10 feet	Production hole

DRILLING TIME

FREQUENCY	DEPTH
Geolograph	0-TD

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	- 3700	(1)	Water/LSND	8.6-9.2		<6	
3700	- 7967		Gas/Air/N2/Mist	Volume sufficient to maintain a stable and clean wellbore			
7967	8060	(2)	LSND	9.0-9.2		<6	

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	200	9 5/8"	H-40 ST&C	32#	~~12.25~~ 13.5"	1
Intermediate 1	3700	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	8060	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, 4-6 Stage Limited Entry Hydraulic Frac (Produced Water)

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		21 June 2001 Version 1.0	

Form 46 12-00 MNP

BP America Production Company
BOP Pressure Testing Requirements

Well Name: Fletcher 1M
County: San Juan **State:** New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	2181		
Fruitland Coal	3044		
PC	3304		
Lewis Shale	3569		
Cliff House	4867	500	0
Menefee Shale	5222		
Point Lookout	5565	600	0
Mancos	5950		
Dakota	7710	2600	1500

** Note: Determined using the following formula: ABHP – (.22*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 Requirements