

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 - 080247	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well Gas <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or tribe Name 7. If Unit or CA Agreement, Name and No	
2. Name of Operator BP America Production Company Attn: Mary Corley		8. Lease Name and Well No. Florance 26B	
3a. Address P.O. Box 3092 Houston, Texas 77253	3b. Phone No. (include area code) 281-366-4491	9. API Well No. 3004531780	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 2585' FSL & 1840' FWL At proposed prod. Zone		10. Field and Pool, or Exploratory Blanco Mesaverde	
11. Sec., T., R., M., or Blk, and survey or Area K Sec. 25, T29N, R09W		12. County or Parish San Juan	
13. State New Mexico		14. Distance in miles and direction from nearest town or post office*	
15. Distance from proposed* Location to nearest Property or lease line, ft. (Also to nearest drig. Ujnit line, if any) 800'	16. No. of Acres in lease 299.24	17. Spacing Unit dedicated to this well 299.24 W/2	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1600'	19. Proposed Depth 5089'	20. BLM/BIA Bond No. on file WY2924	
21. Elevations (show whether DF, KDB., RT, GL, etc.) 6025' GL	22. Approximate date work will start* September 01, 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 <i>Mary Corley</i>	Name (Printed/typed) Mary Corley	Date 07/08/2003
Title Senior Regulatory Analyst		
Approved by (Signature) <i>David J. Mankiewicz</i>	Name (Printed/Typed) David J. Mankiewicz	Date AUG 15 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.

*(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 30-045-31780		² Pool Code 72319	³ Pool Name Blanco Mesa Verde
⁴ Property Code 000518	⁵ Property Name Florance		⁶ Well Number # 26B
⁷ OGRID No. 000778	⁸ Operator Name BP AMERICA PRODUCTION COMPANY		⁹ Elevation 6025

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
K (Lot 11)	25	29 N	9 W		2585	SOUTH	1840	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 299.24		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

						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 Colley</i> Printed Name: <i>Mary Colley</i> Title: <i>SE. Regulatory Analyst</i> Date: <i>07-08-2003</i>	
						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: June 9, 2003 Signature and Seal of Professional Surveyor: 7016 Certificate Number	

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

Prospect Name: Florance
Lease: Florance
County: San Juan
State: New Mexico
Date: June 18, 2003

Well No: 26 B
Surface Location: 25-29N-9W, 2585 FSL, 1840 FWL
Field: Blanco Mesaverde

OBJECTIVE: Drill 400' below the top of the Point Lookout Sandstone, set 4 1/2" production liner, Stimulate CH, MF and PL intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 6025'		Estimated KB: 6039'	
Rotary	0 - TD	MARKER		SUBSEA	TVD
LOG PROGRAM TYPE <u>OPEN HOLE</u> None <u>CASED HOLE</u> GR-CCL-TDT	DEPTH INVERAL TDT – TD to 7" shoe	Ojo Alamo		4578	1461
		Kirtland		4472	1567
		Fruitland		4025	2014
		Fruitland Coal	*	3767	2272
		Pictured Cliffs	*	3556	2483
		Lewis	*	3391	2648
		Cliff House	#	2021	4018
		Menefee	#	1806	4233
		Point Lookout	#	1350	4689
		Mancos		1033	5006
REMARKS:		TOTAL DEPTH		950	5089
- Please report any flares (magnitude & duration).		# 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, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120	Spud	8.6-9.2			
120 - 2222 (1)	Water/LSND	8.6-9.2		<6	
2222 - 5089	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	2222	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	5089	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, 2-3 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:

June 18, 2003

Version 1.0

HGJ/MNP/JMP

Form 46 12-00 MNP

BP America Production Company BOP Pressure Testing Requirements

Well Name: Florance
County: San Juan

26 B
State: New Mexico

Formation	Estimated TVD/MD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1461		
Fruitland Coal	2272		
PC	2483		
Lewis Shale	2648		
Cliff House	4018	500	0
Menefee Shale	4233		
Point Lookout	4689	600	0
Mancos	5006		
Dakota	-		

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

Requested BOP Pressure Test Exception: 750 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.

Cementing Program

Well Name: Florance 26B
 Location: 25-29N-9W, 2585 FSL, 1840 FWL
 County: San Juan
 State: New Mexico

Field: Blanco Mesaverde
 API No.
 Well Flac
 Formation: MesaVerde
 KB Elev (est) 6039
 GL Elev. (est) 6025

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)	Cmt Cir. Out (bbl.)
Surface	120	12.25	9.625	ST&C	Surface	NA	
Intermediate	2222	8.75	7	LT&C	Surface	NA	
Production -	5089	6.25	4.5		2122	NA	

Casing Properties:

(No Safety Factor Included)								
Casing String	Size (in.)	Weight (lb/ft)	Grade	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs.)	Capacity (bbl/ft.)	Drift (in.)
Surface		9.625	32 H-40	3370		1400	254	0.0787
Intermediate		7	20 K-55	3740		2270	234	0.0405
Production -		4.5	11.6 J-55	5350		4960	154	0.0155

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	<u>Recommended Mud Properties Prio Cementing:</u>	
			PV	<20
			YP	<10
			Fluid Los: <15	
0 - SCP	Water/Spud	8.6-9.2		
SCP - ICP	Water/LSND	8.6-9.2		
ICP - ICP2	Gas/Air Mist	NA		
ICP2 - TD	LSND	8.6 - 9.2		

Cementing Program:

	Surface	Intermediate	Production
Excess %, Lead	100	100	40
Excess %, Tail	NA	0	40
BHST (est deg. F)	72	110	159
Time Between Stages, (hr)	NA	NA	NA
Special Instructions	1,6	1,6	2,6

1. Do not wash pumps and lines.
2. Wash pumps and lines.
3. Reverse out
4. Run Blend Test on Cement
5. Record Rate, Pressure, and Density on 3.5" disk
6. Confirm densitometer with pressurized mud scales
7. 1" cement to surface if cement is not circulated.
8. If cement is not circulated to surface, run temp. survey 10-12 hr. after landing plug.

Notes:

*Do not wash up on top of plug. Wash lines before displacing production cement job to minimize drillout.

Surface:

Preflush	20 bbl.	FreshWater	
Slurry 1	70 sx Class G Cement		75 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)		
	0.25 #/sk Cellophane Flake (lost circulation additive)		0.3132 cuft/ft OH
	0.1% D46 antifoam		100 % excess

Slurry Properties:	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)
Slurry 1	15.8	1.16	4.95

Casing Equipment: 9-5/8", 8R, ST&C
 1 Guide Shoe
 1 Top Wooden Plug
 1 Autofill insert float valve
 Centralizers, 1 per joint except top joint

Cementing Program

1 Stop Ring
1 Thread Lock Compound

Intermediate:

Fresh Water	20 bbl	fresh water	
Lead		200 sx Class "G" Cement	503 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam'	
Tail		60 sx 50/50 Class "G"/Poz	75 cuft
Slurry 2		+ 2% gel (extender)	
		0.1% D46 antifoam	
500 ft fill		+1/4 #/sk. Cellophane Flake	0.1503 cuft/ft OH
		+ 2% S1 Calcium Chloride	0.1746 cuft/ft csg ann
			80 % excess

Slurry Properties:	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)
Slurry 1	11.7	2.61	17.77
Slurry 2	13.5	1.27	5.72

Casing Equipment: 7", 8R, ST&C

- 1 Float Shoe
- 1 Float Collar
- 1 Stop Ring
- Centralizers, one every other joint to base of Ojo
- 2 Turbolizers across Ojo
- Centralizers, one every 4th joint from Ojo to base of surface casing
- 1 Top Rubber Plug
- 1 Thread Lock Compound

Production:

Fresh Water	10 bbl	CW100	
Slurry		170 LiteCrete D961 / D124 / D154	428 cuft
		+ 0.03 gps D47 antifoam	
		+ 0.5% D112 fluid loss	
TOC@Liner Top		+ 0.11% D65 TIC	

Slurry Properties:	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)	
Slurry	9.5	2.52	6.38	0.1026 cuft/ft OH
				40 % excess
				0.1169 cuft/ft csg ann

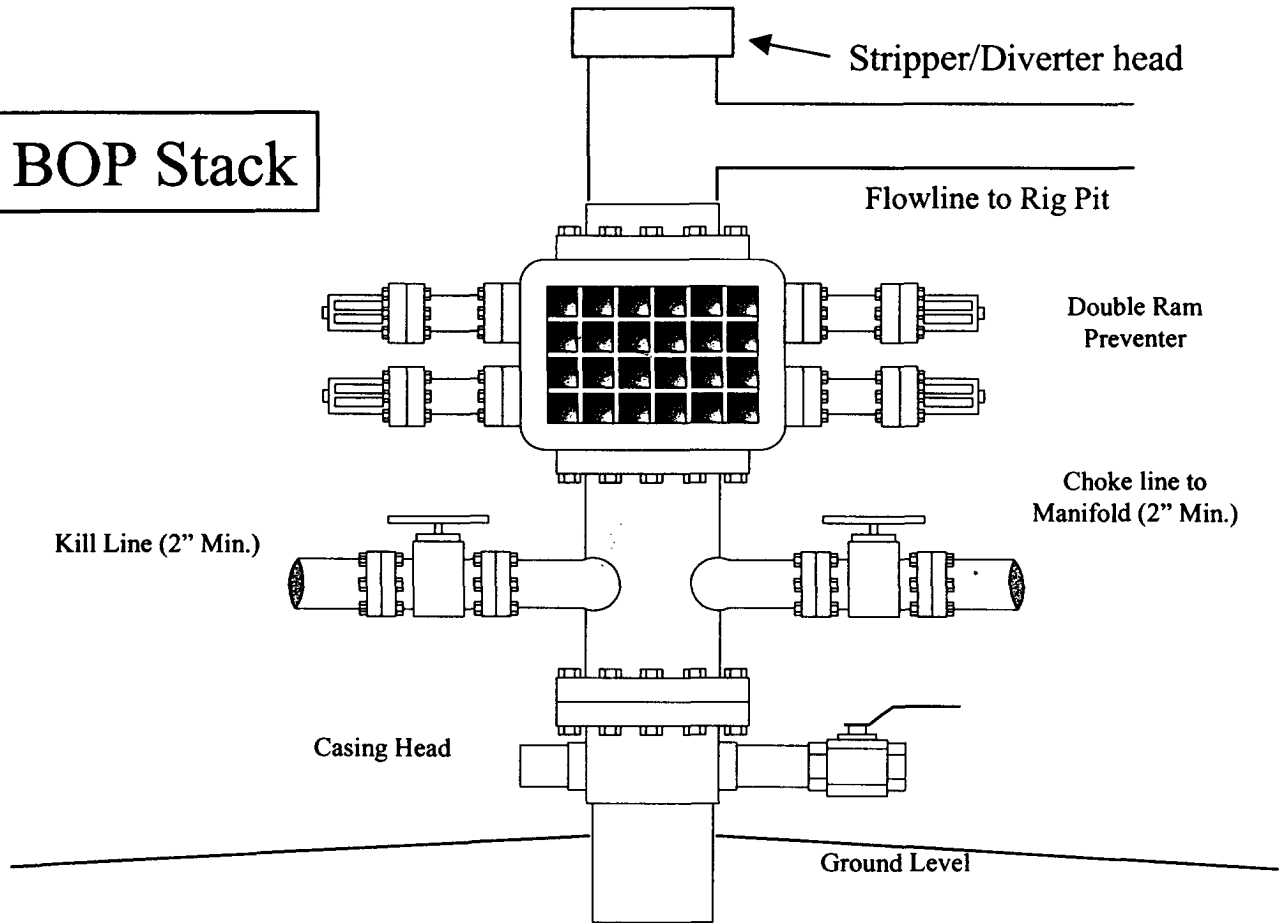
Casing Equipment: 4-1/2", 8R, ST&C

- 1 Float Shoe (autofill with minimal LCM in mud)
- 1 Float Collar (autofill with minimal LCM in mud)
- 1 Stop Ring
- Centralizers, every 4th joint in mud drilled holes, none in air drilled holes
- 1 Top Rubber Plug
- 1 Thread Lock Compound

BP American Production Company
Well Control Equipment Schematic



BOP Stack



Choke & Kill Manifold

