

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. NM-013686
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input 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: CHERRY HLAVA E-Mail: hlavaci@bp.com		8. Lease Name and Well No. PRITCHARD C 1S
3a. Address P.O. BOX 3092 HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281.366.4081 Fx: 281.366.0700	9. API Well No. 3004532123
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface NESE Lot 9 1760FSL 1020FEL At proposed prod. zone		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* 22 MILES N/E FROM AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area I Sec 34 T31N R9W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1020'	16. No. of Acres in Lease 1275.00	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 75'	19. Proposed Depth 3090 MD 2930	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6132 GL	22. Approximate date work will start 03/01/2004	17. Spacing Unit dedicated to this well 316.09 E/2
		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.
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 (Electronic Submission)	Name (Printed/Typed) CHERRY HLAVA	Date 01/08/2004
Title REGULATORY ANALYST		
Approved by (Signature)	Name (Printed/Typed) /s/ David J. Mentkiewicz	Date
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 #26621 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
regulatory review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

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

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 30-045-32123	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 023154	⁵ Property Name Pritchard C	⁶ Well Number # 1S
⁷ OGRID No. 000778	⁸ Operator Name BP AMERICA PRODUCTION COMPANY	⁹ Elevation 6132

¹⁰ Surface Location

UL or Lot No. I (Lot 9)	Section 34	Township 31 N	Range 9 W	Lot Idn	Feet from the 1760	North/South line SOUTH	Feet from the 1020	East/West line EAST	County SAN JUAN
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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
316.09									
¹³ Dedicated Acres	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

16	5230(R)				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Cherry Hlava Signature Cherry Hlava Printed Name Regulatory Analyst Title 1-6-04 Date			
Lot 4	Lot 3	Lot 2	Lot 1					
Lot 5	Lot 6	Lot 7	Lot 8					
Lot 12	Lot 11	Lot 10	Lot 9					
Lot 13	Lot 14	Lot 15	Lot 16					
5262(R)	34				5247(R)			
2612(R)				2630(R)				

(R) - BLM Record

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.
September 26, 2003
Date of Survey
Signature and Seal of Professional Surveyor
7016
Certificate Number

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

Prospect Name: Pritchard C
Lease:

Well No: 1S
Surface Location: Section 34I, T31N, R9W; 1760'
FSL, 1020' FEL
Field: Basin Fruitland Coal

County: San Juan
State: New Mexico
Date: December 15, 2003

OBJECTIVE: Drill to a TD of 3090' md, topset FT with 7" casing and air drill the Fruitland Coal interval, underream and set 5.5" liner.							
METHOD OF DRILLING				APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS		DEPTH OF DRILLING		Estimated GL: 6132		Estimated KB: 6145	
Rotary		0 - 3090' MD, 3103' KB					
LOG PROGRAM							
TYPE		DEPTH INVERAL		MARKER		SUBSEA	
Mud log & gas chromatograph		2700 - TD					
				Ojo Alamo		4546	
				Kirtland		4346	
				Fruitland		3531	
				Fruitland Coal		3429	
				Pictured Cliffs		3214	
						1599	
						1799	
						2614	
						2716	
						2931	
(see Remarks section below).							
REMARKS: At TD and prior to completion of the Fruitland coal interval, the operator will FAX or email a copy of the mud log covering the lower basal Fruitland coal seam and Pictured Cliffs Formation to the FFO-PMT geologist (Chip Harraden @ 505-599- 8997 or chip_harraden@nm.blm.gov). as well as the bp engineer (Dan Crosby @ 281-366-7099 or crosbyde@bp.com). Note: it is very important that the mud log include gas chromatograph results.				TOTAL DEPTH		3055	
						2930	
SPECIAL TESTS				DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE				FREQUENCY DEPTH		FREQUENCY DEPTH	
None				none none		Geologist 0-3000 2930	
REMARKS:							
MUD PROGRAM:							
Approx. Interval		Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification	
0 - 120		Spud	8.6-9.2				
120 - 2700 (1)		Water/LSND	8.6-9.2		<6		
2700 - 3090 2930		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, 8 RND	32.3	12.5"	1	
Intermediate	2700	7"	J-55, 8 RND	20.0	8.75"	1	
Production Liner	2680 - 3090 2930	5 1/2"	J-55, 8 RND	15.5	11.0"	2	
REMARKS: (1) Circulate Cement to Surface (2) under-ream hole from 6.25" to 11.0" before running 5 1/2" liner.							
CORING PROGRAM: None							
COMPLETION PROGRAM: No frac, perforated liner completion. Run 2-3/8" reduced collar tubing to a depth of 3050' kb.							
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: Daniel Crosby		APPROVED:		DATE: 1/5/2004			
Form 46 12-00 MNP							

BOP Test Pressure

BP America Production Company BOP Pressure Testing Requirements

Well Name: Pritchard C
County: San Juan

1S
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1599		
Kirtland	1799		
Fruitland Coal PC	2716	200	0
Lewis Shale			
Cliff House			
Menefee Shale			
Point Lookout			
Mancos			
Dakota			

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

Requested BOP Pressure Test Exception: 850 psi

SAN JUAN BASIN
Fruitland Formation
Pressure Control Equipment

Background

The objective Fruitland Coal 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:	Pritchard C1S	Field:	Basin Fruitland Coal
Location:	Sec 34 - 31N - 09W, 1760' FSL, 1020' FEL	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Fruitland Coal
		KB Elev (est)	6145
		GL Elev. (est)	6132

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	12.5	9.625	ST&C	Surface	NA	
Production -	2700	8.75	7	ST&C	Surface	NA	

Casing Properties:

Casing Properties:		(No Safety Factor Included)						
Casing String	Size	Weight	Grade	Burst	Collapse	Joint St.	Capacity	Drift
	(in.)	(lb/ft)		(psi.)	(psi.)	(1000 lbs.)	(bbl/ft.)	(in.)
Surface		9.625	32 H-40	3370 2270		1400	254	0.0787
Production -		7	20 K-55	3740		2270	254 254	0.0405
								6.456

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	Recommended Mud Properties Prio Cementing:	
			PV	<20
			YP	<10
			Fluid Loss	<6
0 - SCP	Water/Spud	8.6-9.2		
SCP - TD	Water/LSND	8.6-9.2		
SCP - TD	Gas/Air/N2/Mist	NA		

Cementing Program:

	Surface	Production
Excess %, Lead	100	40
Excess %, Tail	NA	40
BHST (est deg. F)	75	120
Special Instructions	1,6,7	2,4,6

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	80 sx Class G Cement		83 cuft
TOC@Surface	+ 3% CaCl2 (accelerator)		
	0.25 #/sk Cellophane Flake (lost circulation additive)		0.347 cuft/ft OH
	0.1% D46 antifoam		
Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	15.8	1.16	4.95

Casing Equipment: 9-5/8", 8R, ST&C
1 Guide Shoe

Cementing Program

1 Top Wooden Plug
 1 Autofill insert float valve
 Centralizers, 1 per joint except top joint
 1 Stop Ring
 1 Thread Lock Compound

Production:

Fresh Water 10 bbl CW100

Lead	180 sx Class "G" Cement	459 cuft
Slurry 1	+ 3% D79 extender	
TOC@Surface	+ 2% S1 Calcium Chloride	
	+1/4 #/sk. Cellophane Flake	
	+ 0.1% D46 antifoam'	
Tail	90 sx 50/50 Class "G"/Poz	105 cuft
Slurry 2	+ 2% gel (extender)	
500 ft fill	0.1% D46 antifoam	0.1503 cuft/ft OH
	+1/4 #/sk. Cellophane Flake	0.1746 cuft/ft csg ann
	+ 2% CaCl2 (accelerator)	

Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	11.4	2.61	17.77
Slurry 2	13.5	1.27	5.72

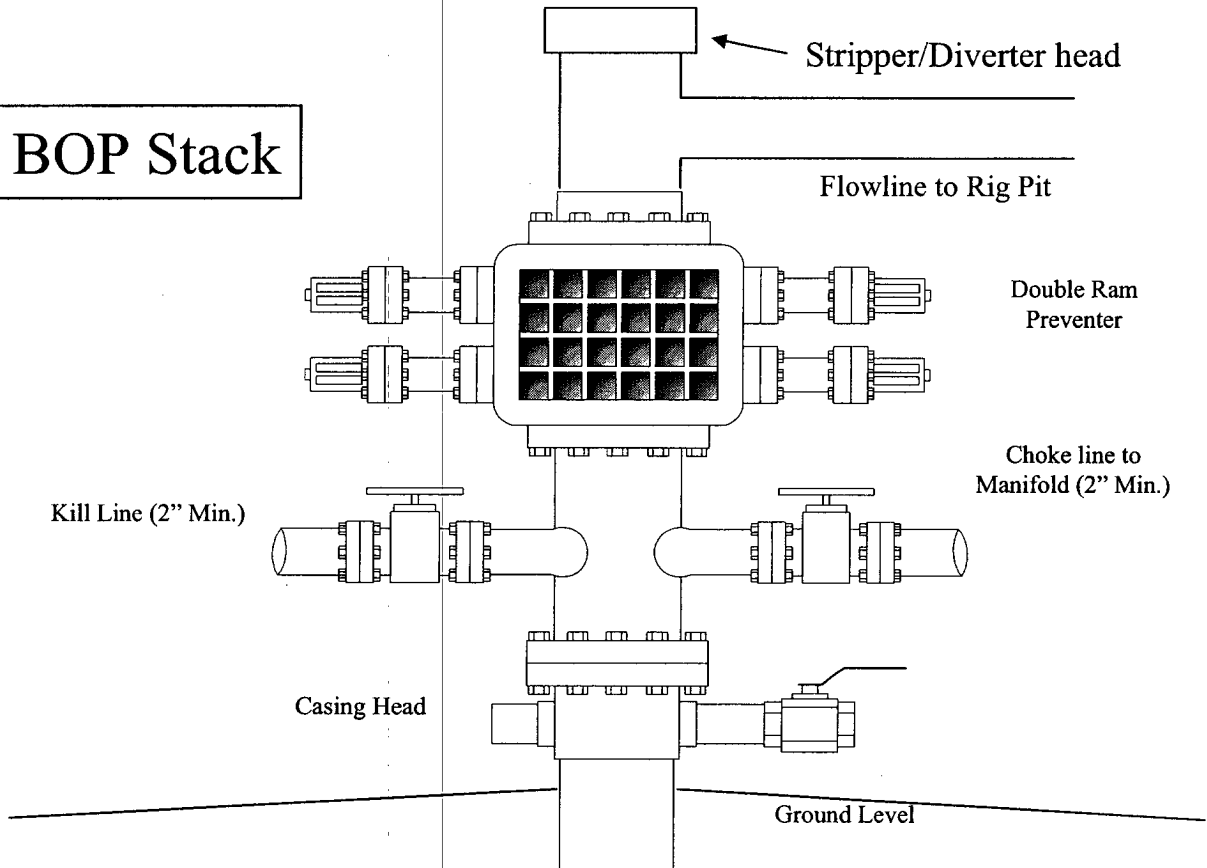
Casing Equipment: 7", 8R, ST&C

1 Float Shoe (autofill with minimal LCM in mud)
 1 Float Collar (autofill with minimal LCM in mud)
 1 Top Rubber Plug
 1 Thread Lock Compound

BP American Production Company
Well Control Equipment Schematic



BOP Stack



Choke & Kill Manifold

