Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FEB 2004 DIST. 3

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. NM 013686
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. PRITCHARD B 5S
2. Name of Operator BP AMERICA PRODUCTION COMPANY Contact: CHERRY HLAVA E-Mail: hlavacl@bp.com	9. API Well No. 30045 32122
3a. Address P.O. BOX 3092 HOUSTON, TX 77253-3092 / 3b. Phone No. (include area code) Ph: 281.366.4081 Fx: 281.366.0700	10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface NWNW Lot 4 890FNL 1205FWL 36.51600 N Lat, 107.46400 W Lon At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 34 T31N R9W Mer NMP
14. Distance in miles and direction from nearest town or post office* 22.5 MILES N/E FROM AZTEC, NM	12. County or Parish SAN JUAN / 13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 890' / 16. No. of Acres in Lease 1275.56	17. Spacing Unit dedicated to this well 315.47 W/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 75' TO NEAREST WELL / 19. Proposed Depth ~~3060~~ 2890 MD	20. BLM/BIA Bond No. on file WY2924
21. Elevations (Show whether DF, KB, RT, GL, etc. 6088 GL / 22. Approximate date work will start 03/01/2004	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	Name (Printed/Typed)	Date
(Electronic Submission)	CHERRY HLAVA	01/08/2004

Title: REGULATORY ANALYST

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ David J. Mankiewicz		FEB 19 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.

Additional Operator Remarks (see next page) Fruitland HPA released 2-5-04

Electronic Submission #26551 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

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

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
	71629	Basin Fruitland Coal

4 Property Code	5 Property Name	6 Well Number
000961	Pritchard B	# 5S

7 OGRID No.	8 Operator Name	9 Elevation
000778	BP AMERICA PRODUCTION COMPANY	6088

10 Surface Location

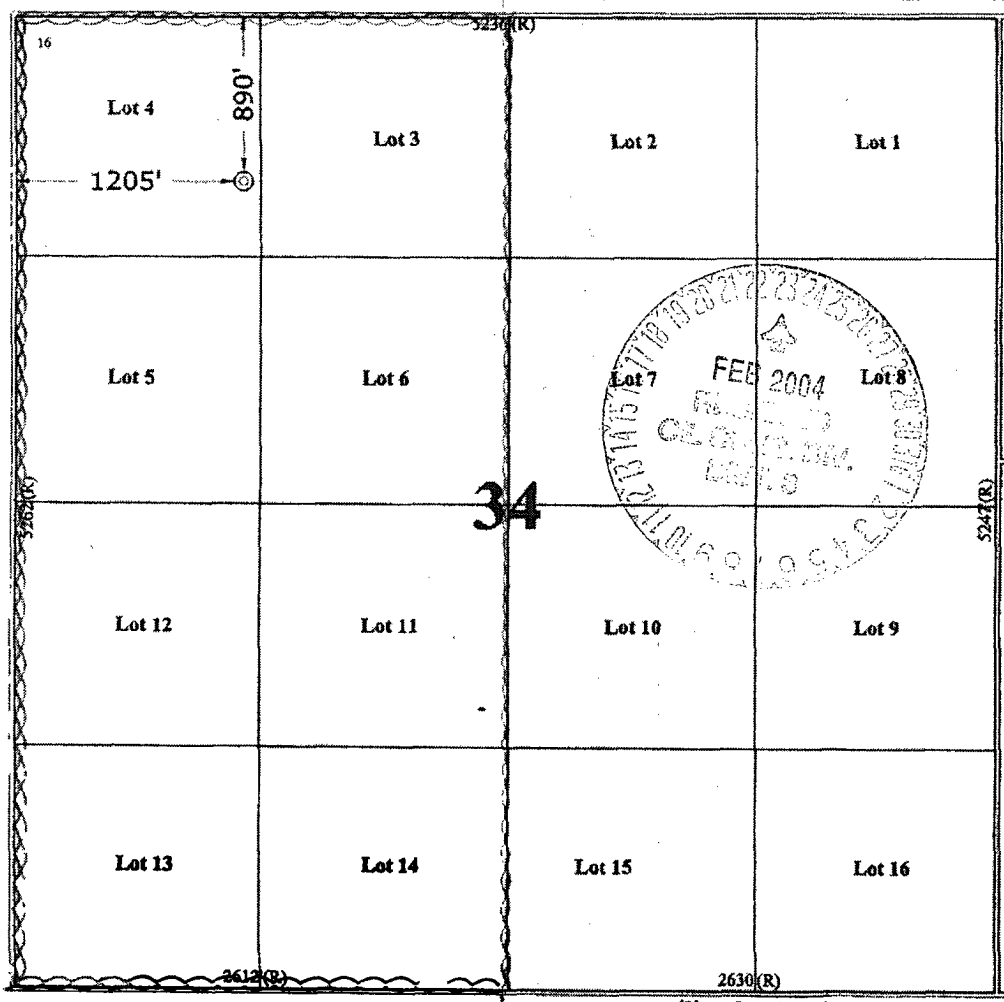
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D (Lot 4)	34	31 N	9 W		890	NORTH	1205	WEST	SAN JUAN

Bottom Hole Location If Different From Surface

1 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	13 Joint or Infill	14 Consolidation Code	15 Order No.
315.47			

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.

Cherry Hlava
Signature

Cherry Hlava
Printed Name

Regulatory Analyst
Title

1-6-04
Date

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 25, 2003
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

BP AMERICA PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM

Prospect Name: Pritchard B
Lease:
Well No: 5S
Surface Location: Section 34D, T31N, R9W; 890' FNL, 1205' FWL
County: San Juan
State: New Mexico
Field: Basin Fruitland Coal
Date: December 15, 2003

OBJECTIVE: Drill to a TD of 3050' md, topset FT with 7" casing and air drill the Fruitland Coal interval, underream and set 5.5" liner.

METHOD OF DRILLING

TYPE OF TOOLS	DEPTH OF DRILLING
Rotary	0 – 3050' MD, 3063' KB

LOG PROGRAM

TYPE	DEPTH INVERAL
Mud log & gas chromatograph	2500 - TD

(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.

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER
Estimated GL: 6088 Estimated KB: 6101

MARKER		SUBSEA	MEAS. DEPTH
Ojo Alamo		4627	1474
Kirtland		4411	1690
Fruitland		3529	2572
Fruitland Coal	*#	3416	2685
Pictured Cliffs	*	3209	2892
TOTAL DEPTH		3051	~~3050~~ 2890

Probable completion interval * Possible Pay

SPECIAL TESTS

TYPE
None

REMARKS:

DRILL CUTTING SAMPLES

FREQUENCY	DEPTH
none	none

DRILLING TIME

FREQUENCY	DEPTH
Geolograph	0-~~3050~~ 2890

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	- 2670	(1)	Water/LSND	8.6-9.2		<6	
2670	- ~~3050~~ 2890		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	2670	7"	J-55, 8 RND	20.0	8.75"	1
Production Liner	2650 - ~~3050~~ 2890	5 ½"	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 ½" liner.

CORING PROGRAM:
None

COMPLETION PROGRAM:
No frac, perforated liner completion. Run 2-3/8" reduced collar tubing to a depth of 3000' 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:	APPROVED:	DATE:	
Daniel Crosby		1/5/2004	

Form 46 12-00 MNP

BP America Production Company
BOP Pressure Testing Requirements

Well Name: **Pritchard B** **5S**
County: **San Juan** **State:** **New Mexico**

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1474		
Kirtland	1690		
Fruitland Coal	2685	200	0
PC			
Lewis Shale			
Cliff House			
Menefee Shale			
Point Lookout			
Mancos			
Dakota			

** Note: Determined using the following formula: ABHP – (.22*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~~ Fruitland Coal. 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 B5S	Field:	Basin Fruitland Coal
Location:	Sec 34 - 31N - 09W, 890' FNL, 1205' FWL	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Fruitland Coal
		KB Elev (est)	6101
		GL Elev. (est)	6088

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 -	2670	8.75	7	~~ST~~LT&C	Surface	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~~ 2270	1400	254	0.0787	8.845
Production -	7	20	K-55	3740	2270	~~254~~ 234	0.0405	6.456

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight
0 - SCP	Water/Spud	8.6-9.2
SCP - TD	Water/LSND	8.6-9.2
SCP - TD	Gas/Air/N2/Mist	NA

Recommended Mud Properties Prio Cementing:

PV	<20
YP	<10
Fluid Loss	<6

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 minmize 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	452 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