

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. SF 080247
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. FLORANCE 117S
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. 30-045-32363
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESE Lot 16 660FSL 950FEL 36.40600 N Lat, 107.44800 W Lon 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* 16.1 MILES SOUTH/EAST FROM BLOOMFIELD, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 35 T29N R9W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660	16. No. of Acres in Lease	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 100'	19. Proposed Depth 2300 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5748 GL	22. Approximate date work will start 08/15/2004	17. Spacing Unit dedicated to this well 306.35 E/L
23. Estimated duration 7 DAYS		20. BLM/BIA Bond No. on file WY2924
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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 05/17/2004
Title REGULATORY ANALYST		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 8-13-04
Title AFM	Office FFO	

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 #30790 verified by the BLM Well Information System  
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

DRILLING AND REENTRY OPERATIONS  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"

\*\* 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

<sup>1</sup> API Number <b>30-045-32363</b>		<sup>2</sup> Pool Code <b>71629</b>	<sup>3</sup> Pool Name <b>Basin Fruitland Coal</b>
<sup>4</sup> Property Code <b>518</b>	<sup>5</sup> Property Name <b>Florance</b>		<sup>6</sup> Well Number <b># 117S</b>
<sup>7</sup> OGRID No. <b>000 778</b>	<sup>8</sup> Operator Name <b>BP AMERICA PRODUCTION COMPANY</b>		<sup>9</sup> Elevation <b>5748</b>

<sup>10</sup> Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>P (Lot 16)</b>	<b>35</b>	<b>29 N</b>	<b>9 W</b>		<b>660</b>	<b>SOUTH</b>	<b>950</b>	<b>EAST</b>	<b>SAN JUAN</b>

<sup>11</sup> Bottom Hole Location If Different From Surface

<sup>7</sup> UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres <b>306.35</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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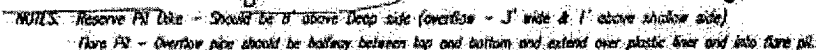
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p><sup>16</sup></p> <p>Lot 4      Lot 3      Lot 2      Lot 1</p> <p>Lot 5      Lot 6      Lot 7      Lot 8</p> <p>Lot 12      Lot 11      Lot 10      Lot 9</p> <p>Lot 13      Lot 14      Lot 15      Lot 16</p> <p>5141(R)      5186(R)      5191(R)</p> <p>2592(R)      2572(R)</p>				<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Cherry Hlava</i> Signature <b>Cherry Hlava</b> Printed Name <b>Regulatory Analyst</b> Title <b>3-25-04</b> Date</p> <p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p><b>February 23, 2004</b> Date of Survey Signature and Seal of Professional Surveyor <b>GARY D. VANN</b> <b>7016</b> <b>REGISTERED PROFESSIONAL LAND SURVEYOR</b> <b>7016</b> Certificate Number</p>
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Florance #117S  
660' F/SL 950' F/EL  
SEC. 35, T29N, R9W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO

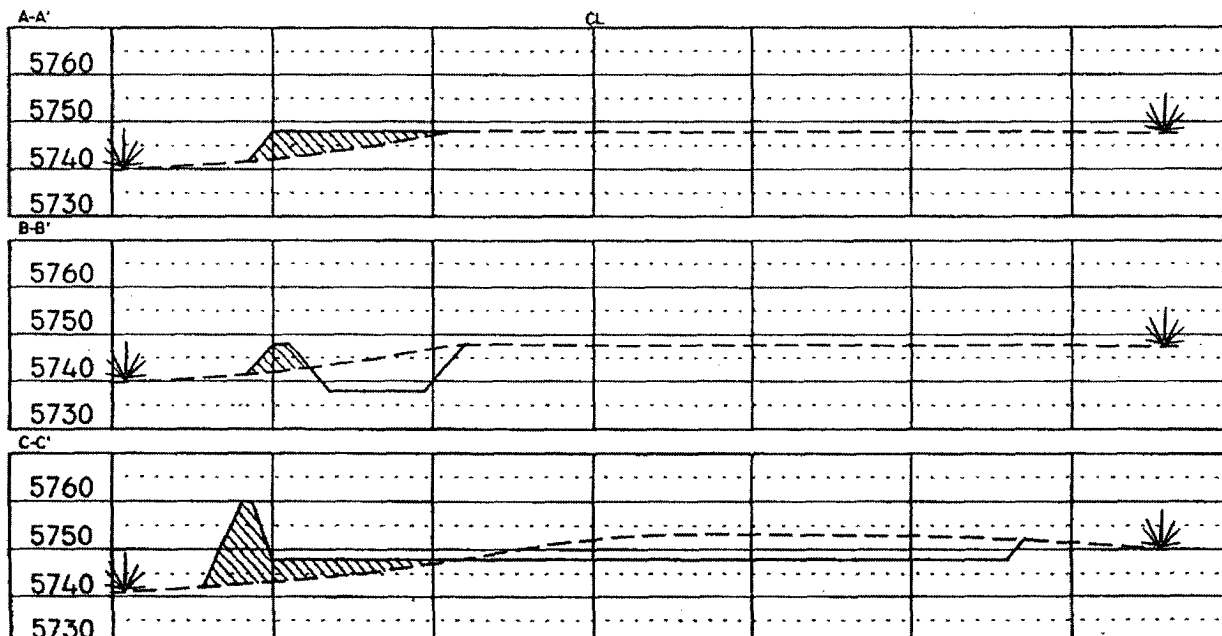
Lat: 36°40'38"

Long: 107°44'47"



Area of Construction Zone - 100'x100' or 100 acres more or less.

SCALE: H=60'-HORIZ.  
V=40'-VERT.



**NOTE:** Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

Cuts and fills shown are approximate - final finished elevation is to be adjusted so earthwork will balance. Corner stakes are approximate and do not include additional areas needed for sideslopes and drainages. Final Pad Dimensions are to be verified by Contractor.

VANN SURVEYS  
P. O. Box 1306  
Farmington, NM

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

**Prospect Name:** Florance 117S  
**Lease:**

**Well No:** 117S  
**Surface Location:** Section 35P, T29N, R09W; 660'  
FSL, 950' FEL  
**Field:** Basin Fruitland Coal

**County:** San Juan  
**State:** New Mexico  
**Date:** April 26, 2004

<b>OBJECTIVE:</b> Drill to a TD of 2300' kb set 7" casing and perf and frac the Fruitland Coal interval.						
<b>METHOD OF DRILLING</b>			<b>APPROXIMATE DEPTHS OF GEOLOGICAL MARKER</b>			
TYPE OF TOOLS Rotary		DEPTH OF DRILLING 0 – 2287' MD, 2300' KB	Estimated GL: 5748		Estimated KB: 5761	
<b>LOG PROGRAM</b>			<b>MARKER</b>	<b>SUBSEA</b>	<b>MEAS. DEPTH</b>	
<b>TYPE</b> <u>OPEN HOLE</u> Run1: Run Platform Express (array induction, 3-detector Litho-Density, compensated neutron, caliper, microlog, SP and gamma ray). (see Remarks section below).  Run 2: Run dipole sonic (compressional and shear delta t required for frac gradient log)			Ojo Alamo	4692	1069	
			Kirtland	4581	1180	
			Fruitland	3819	1942	
			Fruitland Coal	*# 3819	1942	
			Pictured Cliffs	* 3610	2151	
<b>DEPTH INVERAL</b> TD up to minimum charge.  TD up to minimum charge.			TOTAL DEPTH		2300	
			# Probable completion interval		* Possible Pay	
<b>SPECIAL TESTS</b>			<b>DRILL CUTTING SAMPLES</b>		<b>DRILLING TIME</b>	
TYPE None			FREQUENCY none	DEPTH none	FREQUENCY Geolograph	
REMARKS:			DEPTH 0-2300			
<b>MUD PROGRAM:</b>						
<b>Approx. Interval</b>		<b>Type Mud</b>	<b>Weight, #/ga</b>	<b>Vis, sec/qt</b>	<b>W/L cc's/30 min</b>	<b>Other Specification</b>
0 - 120		Spud	8.6-9.2			
120 - 2300 (1)		Water/LSND	8.6-9.2		<6	
<b>REMARKS:</b>						
(1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.						
<b>CASING PROGRAM:</b> (Normally, tubular goods allocation letter specifies casing sizes to be used. Hole sizes will be governed by Contract)						
<b>Casing String</b>	<b>Estimated Depth</b>	<b>Casing Size</b>	<b>Grade</b>	<b>Weight</b>	<b>Hole Size</b>	<b>Landing Pt, Cmt, Etc.</b>
Surface/Conductor	120	8-5/8"	H-40, 8 RND	20.0	12-1/4"	1
Intermediate	2300	5-1/2"	J-55, 8 RND	15.5	7-7/8"	1
<b>REMARKS:</b>						
(1) Circulate Cement to Surface						
<b>CORING PROGRAM:</b>						
None						
<b>COMPLETION PROGRAM:</b>						
Rigless, Single Stage Limited Entry Hydraulic Frac						
<b>GENERAL REMARKS:</b>						
Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.						
Form 46 Reviewed by:			Logging program reviewed by: N/A			
<b>PREPARED BY:</b>		<b>APPROVED:</b>		<b>DATE:</b>		
Daniel Crosby				4/26/2004		
Form 46 12-00 MNP						

**Additional Operator Remarks:**

Notice of Staking was submitted on 03/10/2004

The above mentioned well is staked on the existing pad of the Florance 1A.

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 2300 feet and complete into the Basin Fruitland Coal as per the attached drilling plan.

**SUPPLEMENTAL TO SURFACE USE PLAN****New Facilities:**

A 4" diameter buried steel pipeline that is + or - 300 feet in length will be constructed. The pipe wall thickness is .156 and the pipe wall strength is 42,000#. It will be adjacent to the access road and tie the well into an existing gas meter operated by BP America Production Company. The pipeline will not be used to transport gas to drill the well. After the well is spud the pipeline will be authorized by a right-of-way issued by El Paso Services.

If conditions allow, it is our intent to pre-set the 9 5/8" casing on the above mentioned well by drilling a surface hole with air/air mist in lieu of drilling mud and the surface casing be cemented with 94.5 cu/ft type I-II, 20% FLYASH, 14.5 PPG, 7.41 gal/sk, 1.61 cf/sk Yield, 80 DEG BHST ready mix cement. If the area will not allow for pre-set the approved cement program will be followed.

## BOP Test Pressure

### BP America Production Company BOP Pressure Testing Requirements

Well Name: Florance 117S

County: San Juan

State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1069		
Kirtland	1180		
Fruitland Coal	1942	400	0
PC			
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 Fruitland Coal. No abnormal temperature, pressure, or H<sub>2</sub>S 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.

# BP American Production Company

## Well Control Equipment Schematic

