

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 - 078039
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: HLAVACL@BP.COM		8. Lease Name and Well No. BARNES GAS COM A 1 S
3a. Address HOUATON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281-366-4081	9. API Well No. 3004532700
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESE 2180FSL 915FEL 36.96722 N Lat, 107.95056 W Lon At proposed prod. zone NESE 2180FSL 915FEL 36.96722 N Lat, 107.95056 W Lon		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* 16 MILES NORTH FROM AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area I Sec 23 T32N R11W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 915	16. No. of Acres in Lease 320.00	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3145 MD 3145 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6397 GL	22. Approximate date work will start 01/04/2005	17. Spacing Unit dedicated to this well 320.00 E/2
		20. BLM/BIA Bond No. on file WY2924
		23. Estimated duration 7

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 Ph: 281-366-4081	Date 11/18/2004
--	---	--------------------

Title
AGENT

Approved by (Signature)	Name (Printed/Typed)	Date
-------------------------	----------------------	------

Title
AFM

Office
FEO

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.

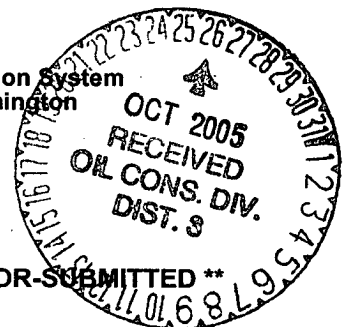
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #51087 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".



** 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

API Number 30-045-32700	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 000295	Property Name Barnes Gas Com A	Well Number # 1S
GORID No. 000778	Operator Name BP AMERICA PRODUCTION COMPANY	Elevation 6397

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	23	32 N	11 W		2180	SOUTH	915	EAST	SAN JUAN

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	Join or Infill	Consolidation Code	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

	" OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <i>Cherry Hlava</i> Printed Name Cherry Hlava Title Regulatory Analyst Date 11-18-04
	" 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 October 4, 2004 Signature and Seal of Professional Surveyor 7016 Certificate Number

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
March 4, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
NEW WELL 30-045-32700

5. Indicate Type of Lease
STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name
Barnes Gas Com A
(APD filed with BLM SF - 078093)

8. Well Number
1 S

9. OGRID Number
000778

10. Pool name or Wildcat
Basin Fruitland Coal

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH
PROPOSALS.)

1. Type of Well:
Oil Well ☐ Gas Well ☒ Other ☐

2. Name of Operator
BP AMERICA PRODUCTION CO

3. Address of Operator
P.O. BOX 3092 HOUSTON, TX 77079-2064

4. Well Location

Unit Letter I : 2180 feet from the South line and 915 feet from the East line

Section 23 Township 32N Range 11W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6397'

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL I Sect 23 Twp 32N Rng 11W Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well 1000'

Distance from nearest surface water >1000' Below-grade Tank Location UL I Sect 23 Twp 32N Rng 11W ;

2230 feet from the South line and 900 feet from the East line PLEASE SEE ATTACHED PAD LAYOUT

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: Lined Drilling PIT PERMIT ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please reference BP America's San Juan Basin Drilling/Workover Pit Construction Plan on file with the NMOCD. Drilling pit Construction Plan issued date of 04/15/2004. Pit will be closed according to closure plan on file.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE _____ TITLE Regulatory Analyst DATE 11/14/04

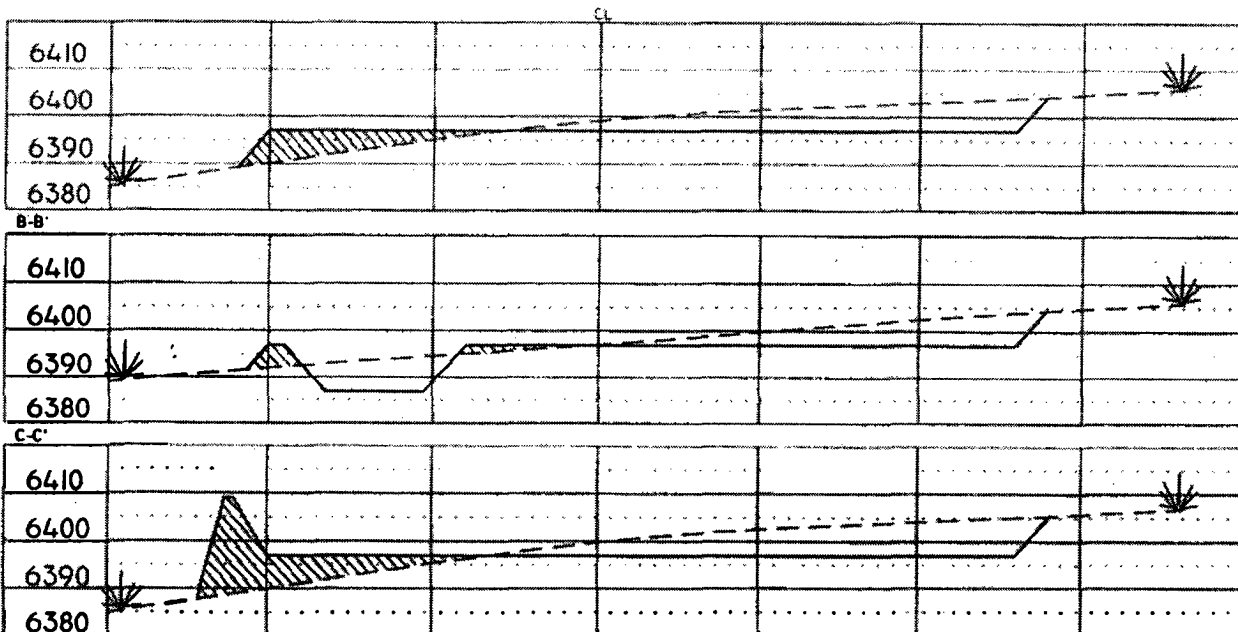
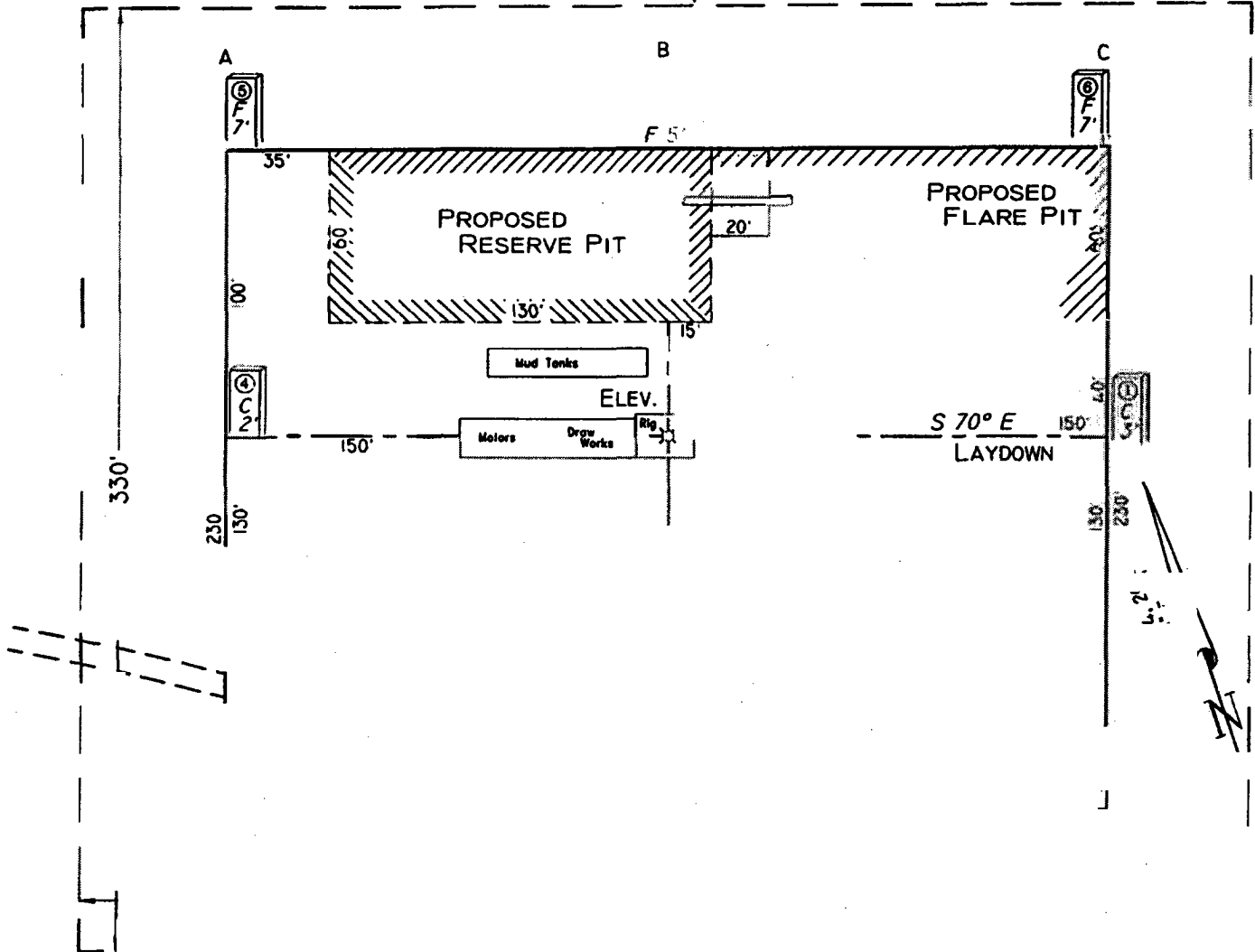
Type or print name Cherry Hlava E-mail address: hlavacl@bp.com Telephone No. 281-366-4081

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS SUPERVISOR, DIST. IV DATE OCT 26 2005
Conditions of approval, if any:

PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 Barnes Gas Com A #1S
 2180' F/SL 915' F/EL
 SEC. 23, T32N, R11W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°58'09"
 Long: 107°57'13"



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: Barnes GC A
Lease:

Well No: 1S
Surface Location: Section 23I, T32N, R11W; 2180
FSL, 915 FEL
Field: Basin Fruitland Coal

County: San Juan
State: New Mexico
Date: October 29, 2004

OBJECTIVE: Drill to a TD of 3145' 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 Rotary		DEPTH OF DRILLING 0 - TD		Estimated GL: 6397		Estimated KB: 6408	
LOG PROGRAM							
TYPE <u>Mud log & gas chromatograph</u>		DEPTH INTERVAL 7" casing set depth -TD		MARKER		SUBSEA	
				Ojo Alamo		5088	
				Kirtland		5006	
				Fruitland		3704	
				Fruitland Coal		3539	
				Pictured Cliffs		3258	
						MEAS. DEPTH	
						1320	
						1402	
						2704	
						2869	
						3150	
REMARKS: (fee land) At TD and prior to completion of the Fruitland coal interval, the operator will FAX or email a copy of the <u>mud log and gas chromatograph analysis covering the lower basal Fruitland coal seam to the FFO-PMT geologist (Chip Harraden @ 505-599-8997 or chip_harraden@nm.blm.gov) and to the BP geologist at hilkewdn@bp.com, fax (281) 366-7099.</u>				TOTAL DEPTH			
						3263	
						3145	
				# Probable completion interval		* Possible Pay	
SPECIAL TESTS				DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE None				FREQUENCY DEPTH none none		FREQUENCY DEPTH Geolograph 0-TD	
REMARKS:							
MUD PROGRAM:							
Approx. Interval		Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification	
0 - 120 (MD)		Spud	8.6-9.2				
120 - 2854 (1)		Water/LSND	8.6-9.2		<6		
2854 - TD		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	20' - 120 (MD)	9 5/8"	H-40, 8 RND	32.3	12.5"	1	
Intermediate	2854	7"	J-55, 8 RND	20.0	8.75"	1	
Liner	2804 to TD	5 1/2"	J-55, 8RND	15.5	11.0"	2	
REMARKS:							
(1) Circulate Cement to Surface							
(2) Under-ream open-hole section from 6.25" to 11.0".							
CORING PROGRAM:							
None							
COMPLETION PROGRAM:							
No frac, perforated liner completion. Run 2-3/8" reduced collar tubing to a depth of xxxx' MD.							
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:			
Form 46 12-00 MNP							

BOP Test Pressure

BP America Production Company BOP Pressure Testing Requirements

Well Name: Barnes GC A
County: San Juan

1S
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo			
Kirtland			
Fruitland Coal		200	0
PC		250	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

C. HARRADEN/ November 23, 2004 *CH*

BP AMERICA/ Barnes BARNES GC COM A # 1S APD

STIPULATION/CONDITION OF APPROVAL

This well is located in an area where the base of the fresh water San Jose aquifer is near the surface. In order to protect the integrity of this shallow fresh water aquifer, a minimum surface csg. depth of 207' is stipulated as a condition of approval for this APD.

Cementing Program

Well Name:	Barnes GC A1S	Field:	Basin Fruitland Coal
Location:	Sec 23 - 32N - 11W, 2180' FSL, 915' FEL	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Fruitland Coal
		KB Elev (est)	6408
		GL Elev. (est)	6397

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	201	12.5	9.625	ST&C	Surface	NA		
Production -	2854	8.75	7	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	2270		1400	254	0.0787
Production -		7	20 J-55	3740		2270	234	0.0405

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	66 sx Class C Cement	83 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)	
		0.347 cuft/ft OH

Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	15.2	1.27	5.8

Casing Equipment:

- 9-5/8", 8R, ST&C
- 1 Guide Shoe
- 1 Top Wooden Plug
- 1 Autofill insert float valve
- Centralizers, as needed
- 1 Stop Ring
- 1 Thread Lock Compound

Production:		
Fresh Water	10 bbl	CW100

Cementing Program

Lead	188 sx Class "G" Cement	491 cuft
Slurry 1	+ 3% D79 extender	
TOC@Surface	+ 2% S1 Calcium Chloride	
	+1/4 #/sk. Cellophane Flake	
	+ 0.1% D46 antifoam'	
Tail	83 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	Yield	Water
	(lb/gal)	(ft3/sk)	(gal/sk)
Slurry 1	11.4	2.61	17.77
Slurry 2	13.5	1.27	5.72

Casing Equipment: 7", 8R, ST&C
 Centralizers, as needed
 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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMSF078039
2. Name of Operator BP AMERICA PRODUCTION CO		6. If Indian, Allottee or Tribe Name
3a. Address PO BOX 3092 HOUSTON, TX 77253		7. If Unit or CA/Agreement, Name and/or No. NMNM83997
3b. Phone No. (include area code) Ph: 281.366.4081		8. Well Name and No. BARNES GAS COM A 1S
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 23 T32N R11W NESE 2180FSL 915FEL 36.96722 N Lat, 107.95056 W Lon		9. API Well No. 30-045-32700-00-X1
		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
		11. County or Parish, and State SAN JUAN COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

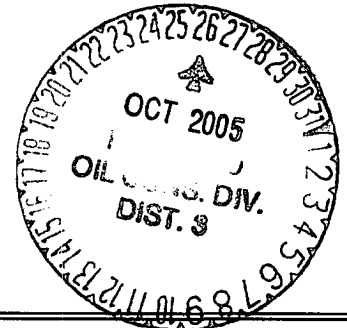
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The original APD was submitted on 11/18/04 and we are waiting on approval.

We respectfully request to change the BOP from a double ram stack to a single ram & annular configuration. Please see attached BOP diagram.

BOP Equipment:

Below conductor casing to total depth 11" nominal or 7 1/16", 2000 psi Single ram preventer with 3000 psi annular preventer and rotating head. All ram type and annular preventers as well as related control equipment will be hydraulically tested to 250 psi (low pressure) and 1500 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.



14. I hereby certify that the foregoing is true and correct. Electronic Submission #54355 verified by the BLM Well Information System For BP AMERICA PRODUCTION CO, sent to the Farmington Committed to AFMSS for processing by ADRIENNE BRUMLEY on 02/22/2005 (05AXB0820SE)	
Name (Printed/Typed) CHERRY HLAVA	Title AGENT
Signature (Electronic Submission)	Date 02/22/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By	Title AFM	Date 10/23/05
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office FFO		

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ******NMOC**

BP American Production Company

Well Control Equipment Schematic

