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

UNITED STATES	ירתי
DEPARTMENT OF THE INTERIOR	<b>?</b> (1)
BUREAU OF LAND MANGEMENT	

300	26	AN	ester.	-	Lease Ser SF - 078	
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	BUREAU OF LAN APPLICATION OFOR PERMI	1	NMSF - 078505					
	,	n, <b>M</b>						
la.	Type of Work: DRILL	7.	7. If Unit or CA Agreement, Name and No					
1b.	Type of Well: Oil Well Gas Well Gas	ne 8.	Lease Name and Well N					
	Name of Operator merica Production Company	Attn:	Cherry Hlava	9.	API Well No. 30045	31917		
P.O.	ddress Box 3092 Houston, Tx 77253-3092	281-366	V / ,	D 71	Field and Pool, or Exploin Fruitland Coal	oratory		
	Loction of Well (Report location clearly and in ac At surface NWNW LOT D 1155' FNL & At proposed prod. Zone		State requirements.*)		Sec., T., R., M., or Blk, 25 T31N & R9W	and survey or Area		
	Distance in miles and direction from nearest town of MILES N/E FROM AZTEC, NM	or post office*	(a)	وي.√	Cou or Parish	13. State		
	Distance from proposed* Location to nearest Property or lease line, ft. 1020' (Also to nearest drig. Ujnit line, if any)		16. No. of Acres in lease 77. 320.88 317.48	17 Spac # 320 317	ing Unit dedicated to this	well		
	Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1200'  19. Proposed Depth 20 2970'				BLM/BIA Bond No. on file WY2924			
4	Elevations (show whether DF, KDB., RT, GL, etc. 6001' GL		22. Approximate date work w 10/27/03	vill start*	23. Estimated durat 3 DAYS	ion		
•			24. Attachments					
1. 2. 3.	ollowing, completed in accordance with the require Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on Natio SUPO shall be filed with the appropriate Forest Se	nal forest System	4. Bond to cover 20 above). 5. Operator certification	the operation fication. ite specific	ns unless covered by an	existing bond on file (see Item		
25.	Cherry Hlava	Name (Prin		-	Date 09/23/2003			
Title								
-	oved by (Signature)	Name (Printed/T)	yped)		Date 1/-3	-03		
Title	<u> </u>	Office						
Oper	ication approval does not warrant or certify the app ations thereon. litions of approval, if any, are attached.	licant holds legal or	r equitable title to those rights in th	ne subject lea	se which would entitle th	e applicant to conduct		
	18 U.S.C. Section 1001 and title 43 U.S.C. Section alse, fictitious or fraudulent statements or represent			willfully to r	nake to any department o	r agency of the United States		

\*(Instructions on reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 3165 3 and appeal pursuant to 43 CFR 3165,4

#### **Additional Operator Remarks:**

Notice of Staking was submitted on 8/29/2003

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 2970' and complete into the Basin Fruitland Coal Pool as per the attached drilling and completion procedure.

#### SUPPLEMENTAL TO SURFACE USE PLAN

#### **New Facilities:**

A 4" diameter buried steel pipeline that is + or - 200 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 Williams field Services, refer to the attached survey plat.

#### **Waiting On Cement Time:**

Waiver of 6 hr. Rule: Because BP America uses 3% CaCl2 in our slurry, we achieve 300 psi compressive strength after 1 hr. 50 min. and 500 psi after 3 hrs. 8 min. Therefore we respectfully request a 2 hr. waiting on cement time (rather than 6 hrs.) prior to commencing any nipple up operations. Please see the attached Compressive Strength chart.

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

		WEI	LL LO	CAT	TION AND	ACRE	AGE DEDIC	ATIC	N PL	AТ		
30-01	API Number	10,5	1 7		ool Code 1 <b>9</b>	R	-ci. En	.1/	Pool 1	Coal		
+ Property	Oode	31917 71629 Basin Fruitland Coal							Coar	6 Well Number		
1173	3	T	rigg F	edei	ral Gas Co	m C						# 1S
OGRID	1		D 4 B 67			Operator N		A BIXZ			,	Elevation COO1
6001  BP AMERICA PRODUCTION COMPANY  Surface Location										6001		
UL or Lot No.	Section	Township	Range	Lo	SUI 1		North/South line	Foot	from the	East/West	line	County
D	25	31 N	9 W		11	55	NORTH	1	020	WE	EST	SAN JUAN
		II	11 Bott	om	Hole Locati	on If	Different From	n Sur	face	<u></u>		
7 UL or lot no.	Section	Township	Range	L	ot Idn Feet fro	an the	North/South line	Feet	from the	East/Wes	t line	County
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320.88	Join	t or Infill	Consolidatio	n Code	<sup>15</sup> Order No.							
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S							3	529	was plotte	ed from field n	otes of ac	cation shown on this plat tual surveys made by me
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				-24	<u>7'(R)</u>		1		i		-	-

# **UNITED STATES**

FORM APPROVED
OMB No. 1004-0135
Eunizae November 20, 200

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANGEMENT	Expires November 30, 2000				
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an	SF - 078505				
Abandoned well. Use Form 3160-3 (APD) for such proposals	3 1907 -   Ph 12: 15 19 19 dian, Allottee or tribe Name				
SUBMIT IN TRIPLICATE – Other instructions on re	Nerse side 1007, NW				
1. Type of Well  Oil Well  Gas Well  Other	8. Well Name and No.				
2. Name of Operator	9. API Well No.				
BP AMERICA PRODUCTION COMPANY	9. AFT WEIT NO.				
3a. Address P.O. Box 3092 Houston, Tx 77253-3092  3b. Phone No. (include area co 281-366-4081	de) 10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL				
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Section 25 T31N R9W NWNW LOT D 1155' FNL & 1020' FWL	11. County or Parish, State SAN JUAN, NM				
12. CHECK APPROPRIATE BOX(ES) TO INDICATE	NATURE OR NOTICE, REPORT, OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION				
Acidize Deepen	Production (Start/Resume) Water shut-Off				
Notice of Intent  Alter Casing Fracture Tree	at Reclamation Well Integrity				
Casing Repair New Const	ruction Recomplete Other				
Subsequent Report Change Plans Plug and A	bandon Water Disposal				
Final Abandonment Notice Convert to Injection Plug Back					
Attach the Bond under which the work will be performed or provide the Bond N following completion of the involved operations. If the operation results in a mul testing has been completed. Final Abandonment Notices shall be filed only after determined that the site is ready for final inspection.  High Productivity Area Well  In reference to Order No. R-8768-F dated July 17, 2003 BP America	ce locations and measured and true vertical depths of all pertinent markers and zones. o. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days tiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once r all requirements, including reclamation, have been completed, and the operator has Production Co. has notified offset operators; Conoco Phillips &				
Burlington Resources of our intent to drill above mentioned well. No Released 11-13-2003	tification was sent 9/26/03 by certified mail, return receipt requested.				
14. I hereby certify that the foregoing is true an dcorrect  Name (Printed/typed)					
Cherry Hlava	Title Regulatory Analyst				
Signature Cherry Llava	Date 09/26/2003				
THIS SPACE FOR FEDER	AL OR STATE OFFICE USE				
Approved by	Title Date				
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				

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 witin its jurisdiction.

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

Prospect Name: Trigg Federal Gas Com C

Well No: 1S

Lease:

Surface Location: Section 25D, T31N, R9W; 1155

FNL, 1020 FWL

County: San	Juan		Field: Basin Fruitland Coal					
	Mexico							
	ember 2, 2003						1	
OBJECTIVE: Drill to a TD		h 7" casing and air d	rill the Fruitland Coa	al interval.				
	OD OF DRILLING		APPROXIMA				10	
TYPE OF TOOLS	DEPTH OF D		Estimated GL: 6001 Estimated KB: 6014					
Rotary	0 – <u>29</u> 57' MD	, 2970' KB	MARKER		SUB		MEAS. DEPTH	
LC	OG PROGRAM		Ojo Alamo	ŀ	1	4402	1612 <sup>-</sup>	
			Kirtland	1	1	4309	1705	
TYPE	DEPTH INVER	) A I	Fruitland Fruitland Coal			3458 3324	2556 2690	
TYPE Mud log & gas chromatog			Pictured Cliffs			3144	2870	
wide log & gas chromatog	<u> </u>	<u>KD</u>	1 lotared offins			0,44	2010	
			_]	ĺ	1			
REMARKS:								
At TD and prior to comple								
operator will FAX or email								
chromatograph analysis of			·	•				
seam and Pictured Cliffs		J-PIVI I geologist		1	1			
(Chip Harraden @ 505-59 chip_harraden@nm.blm.								
chip_harraden@hin.biin.	gov).							
				1				
			TOTAL DEPT	Ή		3044	2970	
			# Probable co	mpletion int	erval	* Possible	Pay	
	PECIAL TESTS		DRILL CUT				LING TIME	
TYPE			FREQUENC	FREQUENCY DEPTH FREQUENCY D				
None			none	none	Į G	eolograph	0-2970	
REMARKS:								
MUD PROGRAM:	•	1				•		
Approx. Interval	Type Mud	Weight, #/g	Vis, sec/qt	W/L cc'	s/30 min	Other	Specification	
0 - 120	Spud	8.6-9.2						
120 - 2650	(1) Water/LSNI			<6				
2650 - 2970	Gas/Air/N2/	Mist Volume s	ufficient to main	<u>ntain a stab</u>	le and clea	n wellbor	e	
REMARKS:			ا مسئلات مسلمان	-4 h -1		- h - f		
(1) The hole will require	sweeps to keep unio	aded while tresh	water drilling. L	et noie con	aitions aict	ate frequ	ency.	
CASING PROGRAM: (N	omally tubular goods alle	neation latter enecific	a casing sizes to be	vend Holo	م ما النب ممتند	oversed by	Contract	
Casing String		Casing Size	Grade	Weight	Hole Size		ing Pt, Cmt, Etc.	
Surface/Conductor	200'120	9 5/8"	H-40, 8 RND	32.3	12.5		ing i c, ome, e.c.	
Intermediate	2650	7"	J-55, 8 RND	20.0	8.75			
Production	2970	• [	0 00, 0 1110	20.0	11.0			
REMARKS:				<u> </u>	11.0			
(1) Circulate Cement to	Surface							
(2) Under room once by		F!! 4- 44 A!!						

#### **CORING PROGRAM:**

None

**COMPLETION PROGRAM:** 

(2) Under-ream open-hole section from 6.25" to 11.0".

No frac, open-hole completion. Run 2-3/8" reduced collar tubing to a depth of 2740' 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** Form 46 12-00 MNP APPROVED: DATE:

9/2/03

#### **BOP Test Pressure**

## **BP America Production Company BOP Pressure Testing Requirements**

Well Name: Trigg Federal Gas Com C

County: San Juan

15

State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1612		
Kirtland	1705		
Fruitland Coal	2690	400	0
PC	2870	500	0
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

#### **Cementing Program**

Trigg Federal Gas Com C1S Well Name: Field: Basin Fruitland Coal Sec 25 - 31N - 9W, 1155' FNL, 1020" FWL API No. Location: Well Flac County: San Juan New Mexico Formation: Fruitland Coal State: KB Elev (est) 6007 GL Elev. (est) 5995 Casing Program: TOC Cmt Cir. Out Casing String Hole Size Casing Size Thread Stage Tool Est. Depth (ft.) Or TOL (ft.) (bbl.) (ft.) (in.) (in.) 9.625 ST&C Surface Surface 120 12.5 NA Production -2650 LT&C Surface NA 8.75 Casing Properties: (No Safety Factor Included) Collapse Casing String Size Weight Grade **Burst** Joint St Capacity Drift (lb/ft) (psi.) (1000 lbs.) (bbl/ft.) (in.) (psi.) (in.) Surface 9.625 32 H-40 3370 1400 254 0.0787 8.845 Production -20 K-55 3740 2270 234 0.0405 6.456 Mud Program Apx. Interval Mud Type **Mud Weight** Recommended Mud Properties Prio Cementing: PV (ft.) ΥP <10 0 - SCP Water/Spud 8.6-9.2 Fluid Loss <6 SCP - TD Water/LSND 8.6-9.2 Gas/Air/N2/Mist SCP - TD NA Cementing Program: Production Surface Excess %, Lead 100 40 Excess %, Tail NA 40 BHST (est deg. F) 75 120 **Special Instructions** 2,4,6 1,6,7 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 + 2% CaCl2 (accelerator) 0.25 #/sk Cellophane Flake (lost circulation additive) 0.347 cuft/ft OH 0.1% D46 antifoam Slurry Properties: Water Density Yield (lb/gal) (ft3/sk) (gal/sk) Slurry 1 15.8 1.16 4.95 9-5/8", 8R, ST&C Casing Equipment: 1 Guide Shoe 1 Top Wooden Plug 1 Autofill insert float valve Centralizers, 1 per joint except top joint 1 Stop Ring 1 Thread Lock Compound

### **Cementing Program**

Production:					<del> </del>		
	Fresh Water	10 bbi	CW100				
	Lead		180 sx Clas	s "G" Cement		448 cu	ft
	Slurry 1		+ 3% D	79 extender			
	TOC@Surface		+ 2% S	1 Calcium Chloride			
			+1/4 #/	sk. Cellophane Flake			
			+ 0.1%	D46 antifoam'			
	Tail		90 sx 50/5	0 Class "G"/Poz		105 cu	ft
	Slurry 2		+ 2% g	el (extender)			
	500	ft fill	0.1% D	46 antifoam		0.1503 cu	ft/ft OH
			+1/4 #/	sk. Cellophane Flake		0.1746 cu	ft/ft csg ann
			+ 2% C	aCl2 (accelerator)			
Slurry Properties	:	Density	Yield		Water		
		(lb/gai)	(ft3/sk)		(gal/sk)		
Slurry 1		11.4	2.61		17.77		
Slurry 2		13.5	1.27	•	5.72		
Casing Equipmen	nt:	7", 8R, ST&C					
		1 Float Shoe (autofil	I with minimal LCM	in mud)			
		1 Float Collar (autofi	ill with minimal LCN	l in mud)			
		1 Top Rubber Plug					
		1 Thread Lock Com	pound				

# BP American Production Company Well Control Equipment Schematic



Stripper/Diverter head **BOP Stack** Flowline to Rig Pit Double Ram Preventer Choke line to Manifold (2" Min.) Kill Line (2" Min.) Casing Head Ground Level Positive Choke or Adjustable Choke Choke & Kill Bypass to Pit or rig pit possum belly (optional) Manifold 2" minimum size Pressure Gauge From BOP Stack Straight-thru to blow 2" minimum size 2" minimum size pit/tank or return to rig Pit

Working Pressure for all equipment is 2,000 psi or greater

Adjustable Choke

2" minimum size

To Blow Tank or burn Pit