

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 077111 080246
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.
3a. Address P.O. BOX 3092 HOUSTON, TX 77253-3092		8. Lease Name and Well No. FLORANCE 119S
3b. Phone No. (include area code) Ph: 281.366.4081 Fx: 281.366.0700		9. API Well No. 30-045-32368
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSE 865 FSL 1973 FEL 36.42400 N Lat, 107.45700 W Lon At proposed prod. zone 1970 1446		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* 14 MILES EAST FROM BLOOMFIELD, NM		11. Sec., T., R., M., or Blk. and Survey or Area See 22 T29N R9W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 865	16. No. of Acres in Lease 2380 MD	12. County or Parish SAN JUAN
17. Spacing Unit dedicated to this well 311.97 E2	18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	13. State NM
19. Proposed Depth 2380 MD	20. BLM/BIA Bond No. on file WY2924	
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5759 GL	22. Approximate date work will start 08/15/2004	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:

- 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 05/19/2004
Title REGULATORY ANALYST		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) FDO	Date 10-12-04
Title AFM		

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 #30902 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

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

ALL ACTIONS ARE
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

1 API Number 30-045-32368		2 Pool Code 71629		3 Pool Name Basin Fruitland Coal		
4 Property Code 000518		5 Property Name Florance			6 Well Number # 119S	
7 OGRID No. 000778		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 5759	

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
J	22	29 N	9 W		1870	SOUTH	1440	EAST	SAN JUAN

11 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

12 Dedicated Acres 311.97	13 Joint or Infill	14 Consolidation Code	15 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

16				5081(R)				17 OPERATOR CERTIFICATION			
Lot 4				Lot 3				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.			
Lot 5				Lot 2				Signature Cherry Alava			
Lot 6				Lot 1				Printed Name Cherry Alava			
								Title Regulatory Analyst			
								Date 9-29-04			
								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.			
								Restaked: August 19, 2004			
								February 24, 2004			
								Date of Survey			
								Signature and Seal of Professional Surveyor			
								GARY D. VANN NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 7016			
								Certificate Number 7016			
2612(R)				2629(R)							

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
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Florance (Federal well SF - 077111)
8. Well Number 119 S
9. OGRID Number
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 O : 865 feet from the SOUTH line and 1375 feet from the EAST line

Section 22 Township 29N Range 09W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5759' GR

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

Pit Location: UL O Sect 22 Twp 29N Rng 09W 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 O Sect 22 Twp 29N Rng 09W ;

965' feet from the SOUTH line and 1505 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: 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 Cherry Hlava TITLE Regulatory Analyst DATE 5/20/04

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

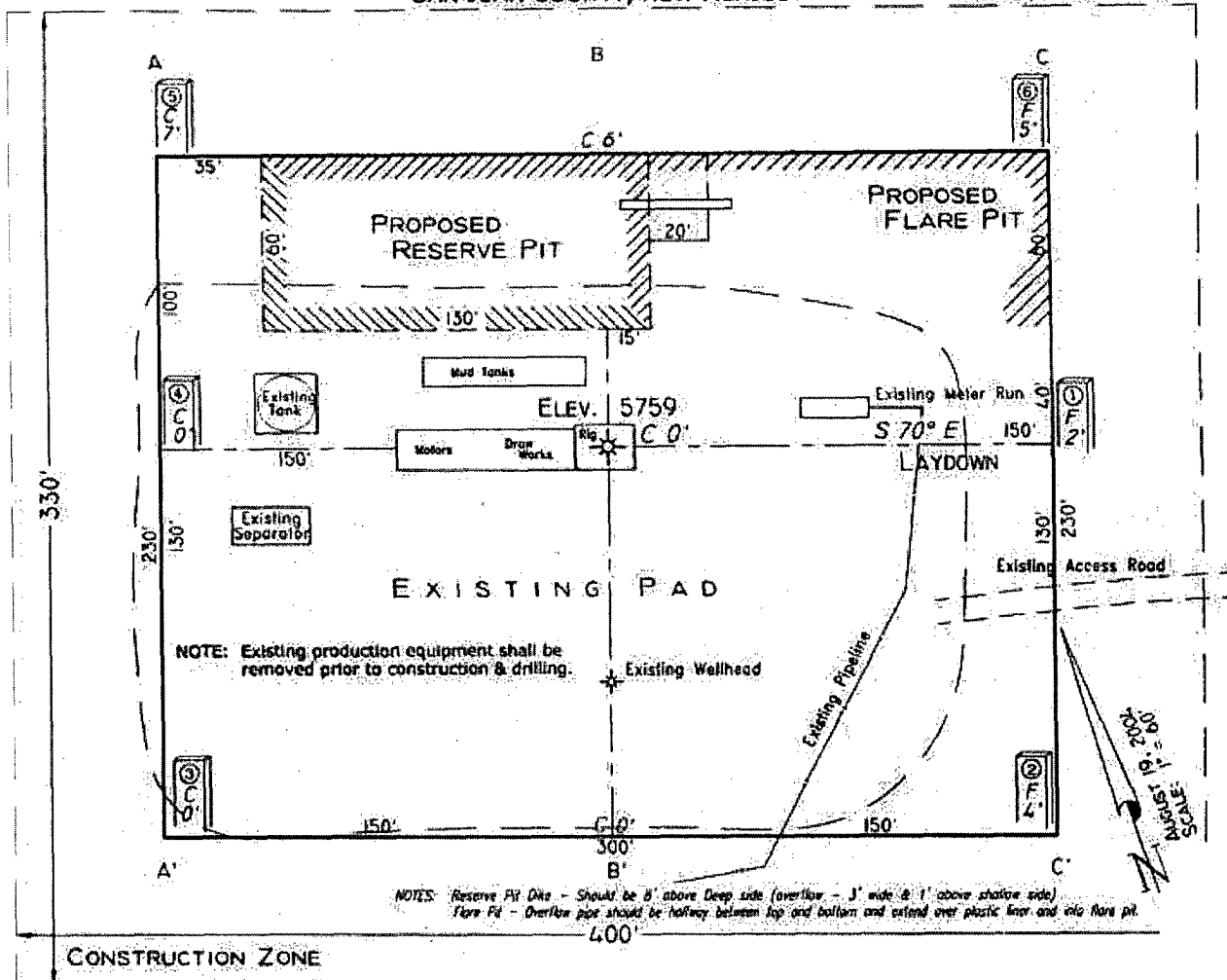
(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 43 DATE OCT 15 2004

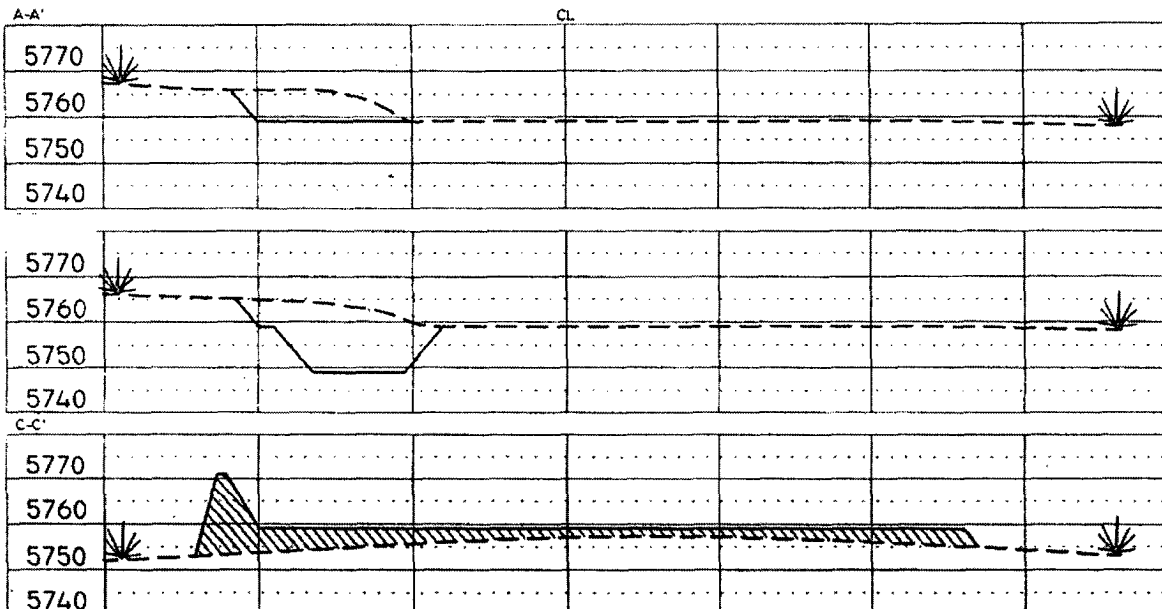
Conditions of approval, if any:

PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 Florance # 119S
 1870' F/SL 1440' F/EL
 SEC. 22, T29N, R9W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°42'32"
 Long: 107°45'43"



Area of Construction Zone - 330'x400' or 3.03 acres, more or less.



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

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.5. Lease Serial No.
NMSF080246

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other8. Well Name and No.
FLORANCE 119S2. Name of Operator
BP AMERICA PRODUCTION COContact: CHERRY HLAVA
E-Mail: HlavaCL@bp.com9. API Well No.
30-045-32368-00-X13a. Address
200 ENERGY CT
FARMINGTON, NM 874023b. Phone No. (include area code)
Ph: 281.366.408110. Field and Pool, or Exploratory
BASIN FRUITLAND COAL

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 22 T29N R9W SWSE 865FSL 1375FEL
36.42400 N Lat, 107.45700 W Lon

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 APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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 recompleate 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 recompleation 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.)

Original APD was submitted on 5/19/04. Location had to be changed due to cactus.

BP America Production Company respectfully requests permission to amend the location for the subject well as follows:

From: 865' FSL & 1375' FEL Section 22 T29N & R9W

To: 1870' FSL & 1440' FEL Section 22 T29N & R9W

Attached in support of our request is an amended C-102 and related surface location plats.

ROW



14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #36861 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 10/05/2004 (05AXB0031SE)**


Name (Printed/Typed) CHERRY HLAVA

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 09/29/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By 	Title AFM	Date 10-12-04
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 FDO	

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 ******NMOCD**

Additional Operator Remarks:

Notice of Staking was submitted on 05/07/2004

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 2380 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 - 500 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.

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

Prospect Name: Florance 119S
Lease:
County: San Juan
State: New Mexico
Date: April 26, 2004

Well No: 119S
Surface Location: Section 22, T29N, R09W; 865'
 FSL, 1375' FEL
Field: Basin Fruitland Coal

OBJECTIVE: Drill to a TD of 2380' kb set 7" casing and perf and frac the Fruitland Coal interval.							
METHOD OF DRILLING				APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS		DEPTH OF DRILLING		Estimated GL: 5756		Estimated KB: 5769	
Rotary		0 – 2367' MD, 2380' KB					
LOG PROGRAM				MARKER			
TYPE		DEPTH INVERAL		SUBSEA		MEAS. DEPTH	
<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).		TD up to minimum charge.		Ojo Alamo		4680 1089	
				Kirtland		4514 1255	
				Fruitland		3752 2017	
				Fruitland Coal		3752 2017	
				Pictured Cliffs		3540 2229	
Run 2: Run dipole sonic (compressional and shear delta t required for frac gradient log)		TD up to minimum charge.					
REMARKS: - Primary presentation is Bulk Density Presentation (5"=100') with <1.75 g/cc shaded as coal. High resolution pass across the Fruitland interval only. Three final prints to Dennis Hilkeiwich in Houston. Customer LAS file to Dennis Hilkeiwich in Houston – hilkeiwdn@bp.com							
				TOTAL DEPTH		3389 2380	
				# Probable completion interval		* Possible Pay	
SPECIAL TESTS				DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE				FREQUENCY DEPTH		FREQUENCY DEPTH	
None				none none		Geolograph 0-2380	
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 - 2380 (1)		Water/LSND	8.6-9.2		<6		
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	8-5/8"	H-40, 8 RND	20.0	12.5"	1	
Intermediate	2380	5-1/2"	J-55, 8 RND	15.5	8.75"	1	
REMARKS: (1) Circulate Cement to Surface							
CORING PROGRAM: None							
COMPLETION PROGRAM: Rigless, Single Stage Limited Entry Hydraulic Frac							
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				4/26/2004			
Form 46 12-00 MNP							

BOP Test Pressure

BP America Production Company BOP Pressure Testing Requirements

Well Name: Florance 119S

County: San Juan

State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1089		
Kirtland	1255		
Fruitland Coal	2017	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 H2S anticipated.

Equipment Specification

Interval

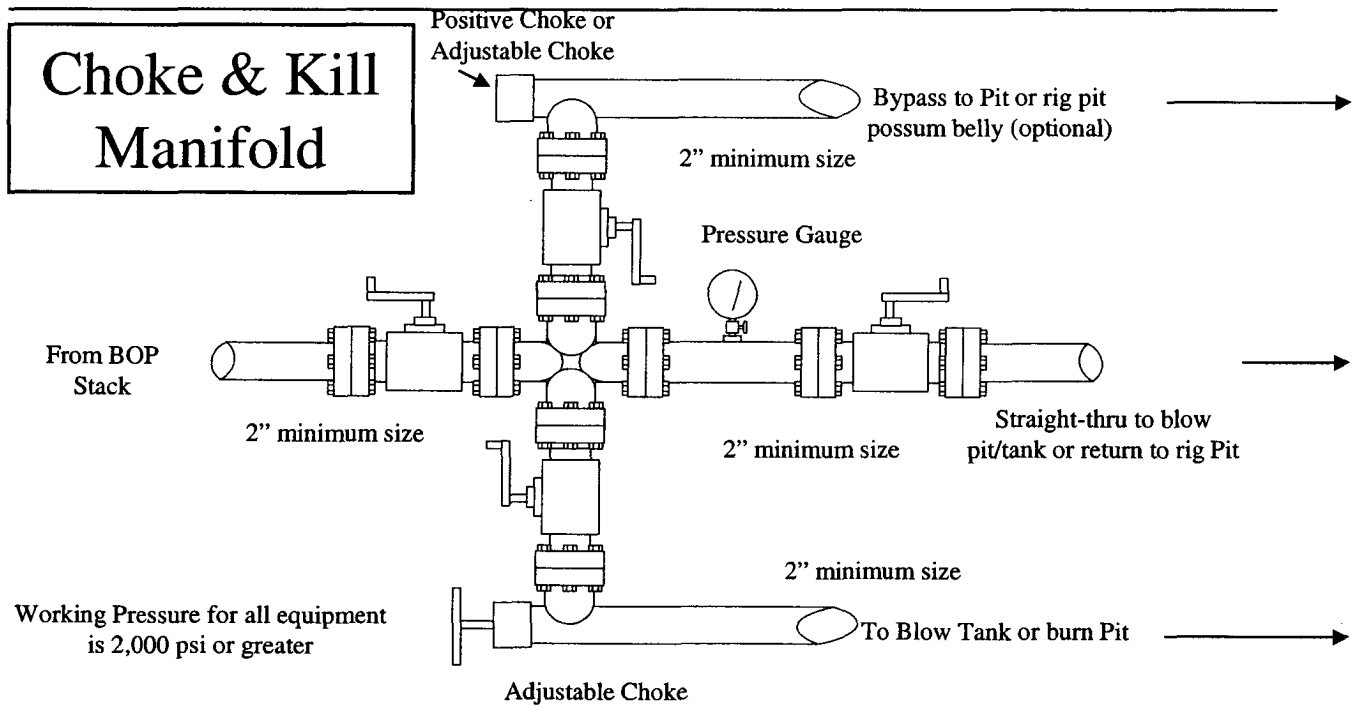
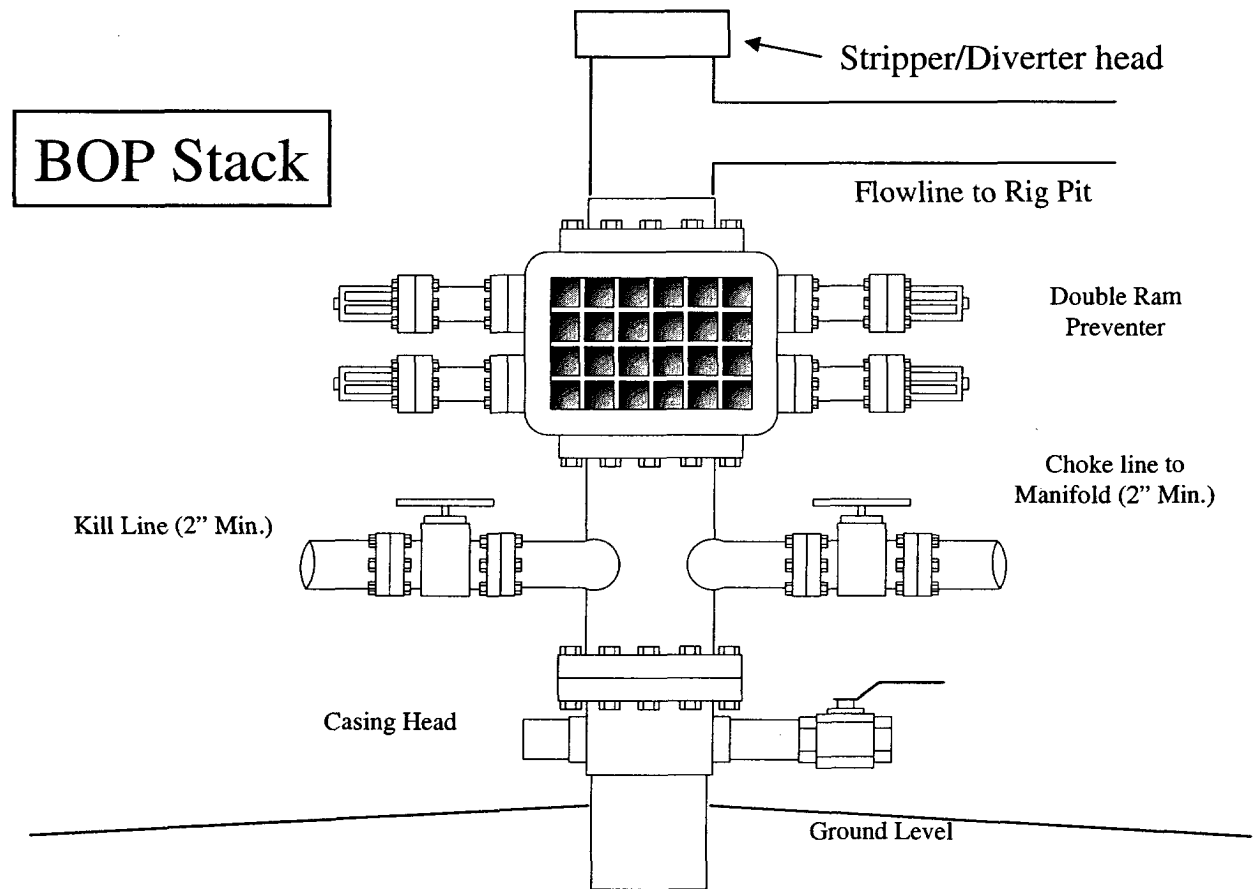
BOP Equipment

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.

BP American Production Company
Well Control Equipment Schematic



Cementing Program

Well Name:	Florance 119S	Field:	Basin Fruitland Coal
Location:	Sec 22 - 29N - 09W, 865' FSL, 1375' FEL	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Fruitland Coal
		KB Elev (est)	5769
		GL Elev. (est)	5756

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)
Surface	120	12.5	8 5/8	8rd	Surface
Production -	2380	8.75	5 1/2	8rd	Surface

Casing Properties:

(No Safety Factor Included)

Casing String	Size (in.)	Weight (lb/ft)	Grade
Surface	8 5/8	20	H-40
Production -	5 1/2	15.5	J-55

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	

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 C Cement		99 cuft
TOC@Surface	+ 2% CaCl ₂ (accelerator)		
			0.4127 cuft/ft OH

Slurry Properties:

	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)
Slurry 1	15.2	1.27	5.8

Casing Equipment:

8-5/8", 8R, ST&C
 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

Production:

Fresh Water	10 bbl	CW100	
Lead	250 sx Class "G" Cement		647 cuft
Slurry 1	+ 3% D79 extender		

Cementing Program

TOC@Surface		+ 2% S1 Calcium Chloride + 1/4 #/sk. Cellophane Flake + 0.1% D46 antifoam		
Tail		140 sx 50/50 Class "G"/Poz		177 cuft
Slurry 2		+ 2% gel (extender)		
	500 ft fill	0.1% D46 antifoam		0.2526 cuft/ft OH
		+ 1/4 #/sk. Cellophane Flake		0.2009 cuft/ft csg ann
		+ 2% CaCl ₂ (accelerator)		
Slurry Properties:		Density	Yield	Water
		(lb/gal)	(ft ³ /sk)	(gal/sk)
Slurry 1		11.4	2.61	17.77
Slurry 2		13.5	1.27	5.72
Casing Equipment:		5 1/2", 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		
