Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANGEMENT
APPLICATION OFOR PERMIT TO DRILL OR REENTER

2005 JUL 11 PM 1 37

RECEIVED
070 FARMINGTON NM

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

5. Lease Serial No. **SF – 078129-A**

6. If Indian, Allottee or tribe Name

1a. Type of Work: ■ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No

1b. Type of Well: ☐ Oil Well ■ Gas Well Gas ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Florance Gas Com J 3S

2. Name of Operator
BP AMERICA PRODUCTION COMPANY

9. API Well No.
30-045-33228

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

3b. Phone No. *(include area code)*
281-366-4081

10. Field and Pool, or Exploratory
Basin Fruitland Coal

4. Loction of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface **1115' FSL & 825' FEL SESE**

At proposed prod. Zone

11. Sec., T., R., M., or Blk, and survey or Area
SECTION 6 T30N & R09W

OCT 2005
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OIL CONS. DIV.
DIST. 3

14. Distance in miles and direction from nearest town or post office*
19+ MILES EAST FROM AZTEC, NM

12. County or Parish
SAN JUAN

13. State
NEW MEXICO

15. Distance from proposed* Location to nearest Property or lease line, ft. (Also to nearest drig. Ujnit line, if any) **825'**

16. No. of Acres in lease
320

17. Spacing Unit dedicated to this well
320 E/2

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth
3339' MD

20. BLM/BIA Bond No. on file
WY2924

21. Elevations (show whether DF, KDB., RT, GL, etc.
6511' GL

22. Approximate date work will start*
07/21/05

23. Estimated duration
3 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: Cherry Hlava | Name *(Printed/typed)*: **Cherry Hlava** | Date: **07/01/2005**

Title: **Regulatory Analyst**

Approved by *(Signature)*: /s/ Matthews | Name *(Printed/Typed)* | Date: 9/28/05

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.

**(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

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

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
30-045-33228	71629	Basin Fruitland Coal

4 Property Code	5 Property Name	6 Well Number
000537	Florance Gas Com J	# 3S

7 OGRID No.	8 Operator Name	9 Elevation
000778	BP AMERICA PRODUCTION COMPANY	6511

10 Surface Location

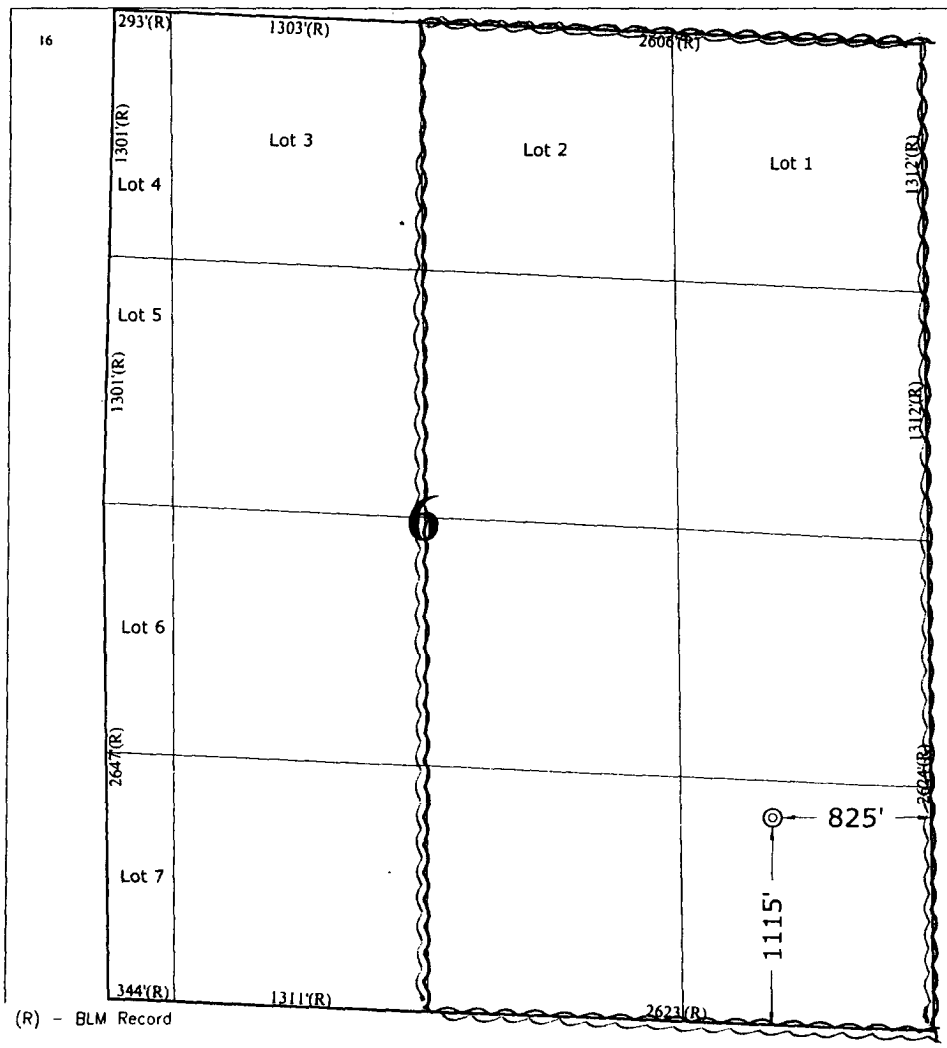
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
p	6	30 N	9 W		1115	SOUTH	825	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

7 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	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

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



(R) - BLM Record

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

7-1-05
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.

Restaked: June 14, 2005
May 16, 2005
Date of Survey

Signature and Seal of Professional Surveyor

GARY D. VANN
NEW MEXICO
7016
REGISTERED PROFESSIONAL LAND SURVEYOR

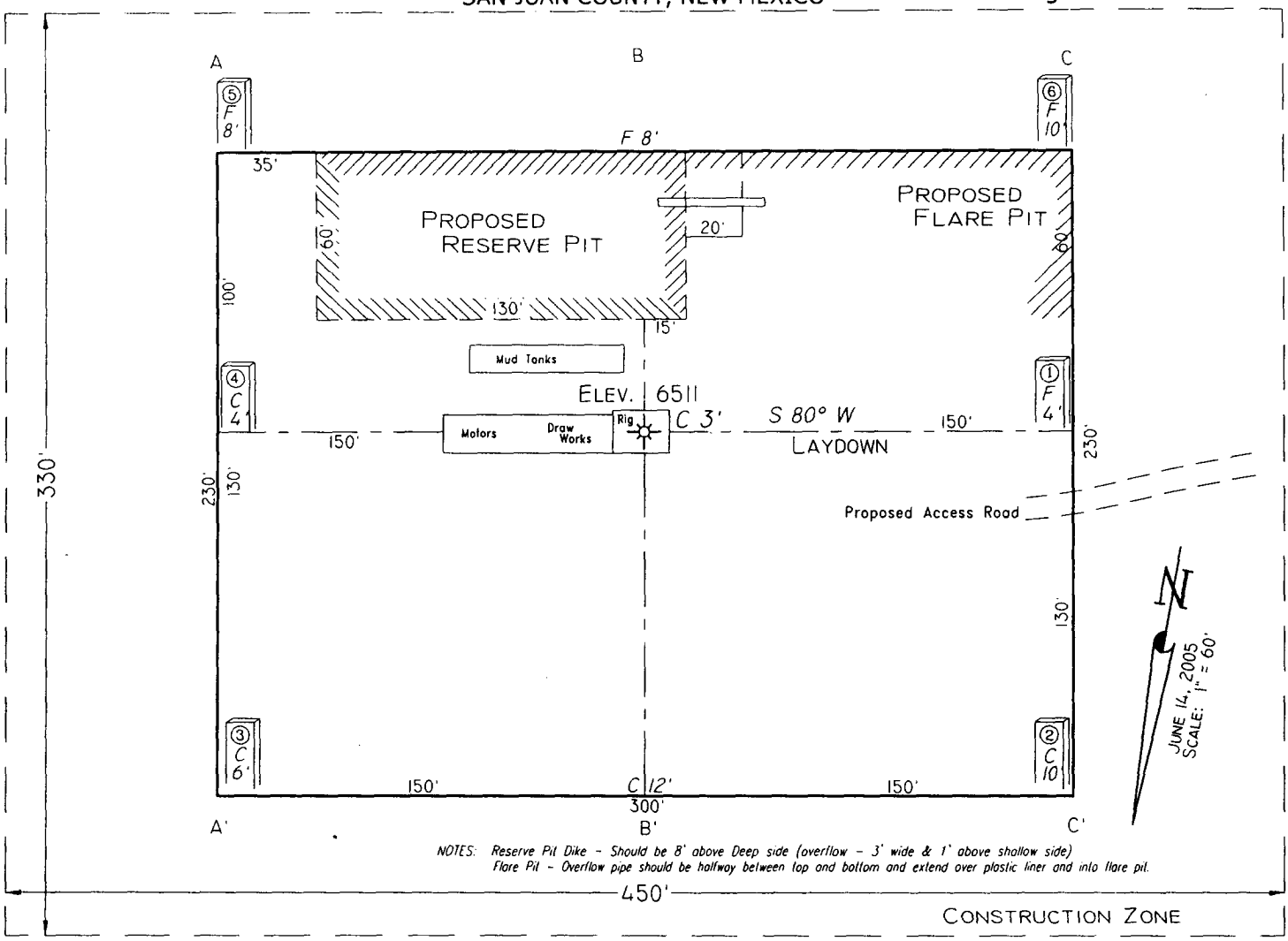
7016
Certificate Number

PAD LAYOUT PLAN & PROFILE

BP AMERICA PRODUCTION COMPANY
Florance Gas Com J # 3S
1115' F/SL 825' F/EL
SEC. 6, T30N, R9W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

Lat: 36.8364°
Long: 107.8156°

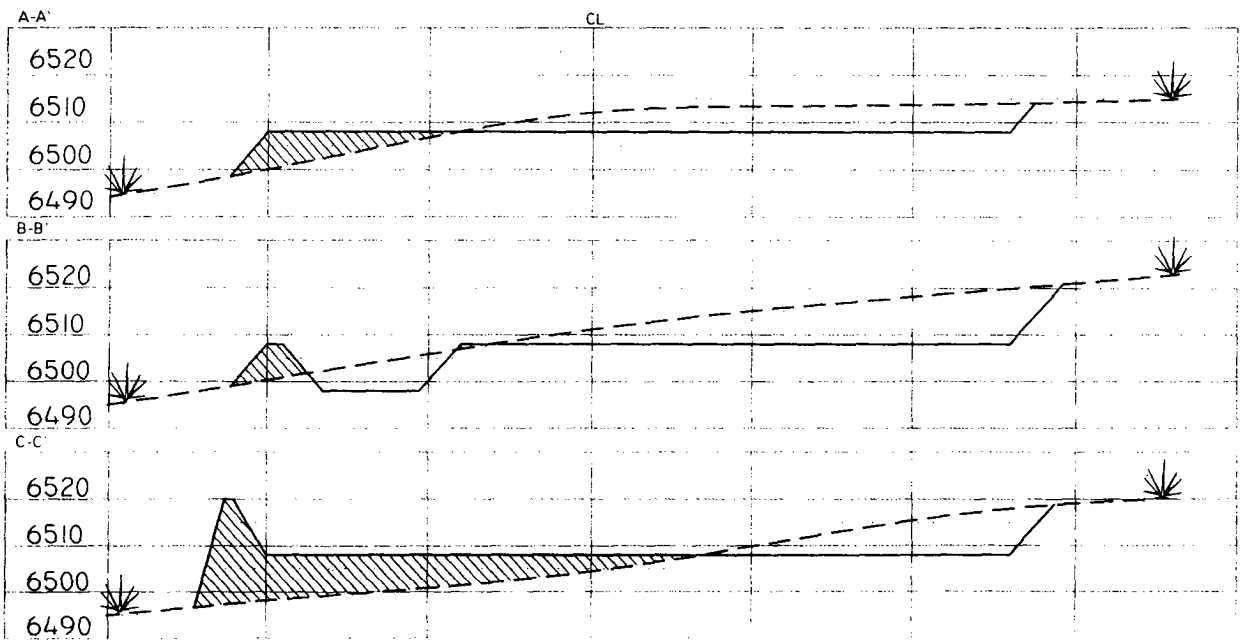
Lat: 36°50'11"
Long: 107°48'56"



NOTES: Reserve Pit Dike - Should be 8' above Deep side (overflow - 3' wide & 1' above shallow side)
Flare Pit - Overflow pipe should be halfway between top and bottom and extend over plastic liner and into flare pit.

Area of Construction Zone - 330'x450' or 3.41 acres, more or less.

SCALE: 1"=60'-HORIZ.
1"=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

6/30/2005

Lease:	Florance GC J	**Well Name & No.**	Florance GC J #3S	**Field:**	Basin Fruitland Coal
County:	San Juan, New Mexico	**Surface Location:**	SE 1/4, S 6, T30N, R9W : 1115' FSL, 825' FEL		
Minerals:		**Surface:**	Lat: 36.8364 Long:-107.8156		
Rig :	Aztec 507	**BH Location:**	SE 1/4, S 6, T30N, R9W : 1115' FSL, 825' FEL		
OBJECTIVE:	Drill to TD, set 5.5" casing, perf and frac the Fruitland Coal interval.				

METHOD OF DRILLING	
TYPE OF TOOLS	DEPTH OF DRILLING
Rotary	0 - TD

LOG PROGRAM	
Type	**Depth Interval**
GR/CCL and RST	TD to Min Charge
Cased Hole	

REMARKS:

Primary Log presentation is RST Coal interpretation (5"=100') with coal shaded. Carbon-oxygen/Inelastic Capture pass across Fruitland interval only. Two final prints and customer LAS file to Dennis Hilkewich in Houston - hilkewdn@bp.com.

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Actual GL: 6511 | Estimated KB: 6,522.0'

Marker		SUBSEA	TVD	APPROX. MD
Ojo Alamo		4,645'		1,877'
Kirtland		4,475'		2,047'
Fruitland Fm		3,633'		2,889'
Fruitland Coal	*#	3,498'		3,024'
Pictured Cliffs	*	3,283'		3,239'
TOTAL DEPTH:		3,183'		3,339'

Probable completion interval | * Possible Pay

SPECIAL TESTS	**DRILL CUTTING SAMPLES**		**DRILLING TIME**	
TYPE	FREQUENCY	DEPTH	FREQUENCY	DEPTH
None	none	none to TD	Geolograph	0 - TD

REMARKS:

MUD PROGRAM:

Interval	TypeMud	#/gal	Vis, sec/qt	/30 min	Other Specification
200'	Spud	8.8 - 9.0	Sufficient to clean hole.		
3,339'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite

CASING PROGRAM:

CasingString	Depth	Size	Casing Size	Grade, Thread	Weight	Landing Point	Cement
Surface/Conductor	200'	12 1/4"	8-5/8"	H-40 ST&C	20#		cmt to surface
Production	3,339'	7 7/8"	5-1/2"	J-55	15.5#		
							cmt to surface

CORING PROGRAM:

None

COMPLETION PROGRAM:

Rigless, Limited Entry Hydraulic Frac

GENERAL REMARKS:

Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.

BOP Pressure Testing Requirements

Formation	Depth	Anticipated bottom hole pressure	Max anticipated surface pressure**
Fruitland	3,024'	500	0
Pictured Cliffs	3,239'	200	0
	-		

Requested BOP Pressure Test Exception = 1500 psi | ** Note: Determined using the following formula: ABHP – (.22*TVD) = ASP

Form 46 Reviewed by:	Logging program reviewed by:			
PREPARED BY:	**APPROVED:**	**DATE:**	**APPROVED:**	**DATE:**
DNH/DDR TT/HGJ		30-Jun-05		
Form 46 7-84bw	For Drilling Dept.		For Production Dept.	

SAN JUAN BASIN
Basin Fruitland Coal 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 single 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. No abnormal temperature, pressure, or H2S anticipated.

Equipment Specification

Interval	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.

FEDERAL CEMENTING REQUIREMENTS

1. All permeable zones containing fresh water and other usable water containing 10,000 PPM or less total dissolved solids will be isolated and protected from contamination by cement circulated in place for the protection of permeable zones per the NTL-FRA 90-1 Section III A.

2. The hole size will be no smaller than 1 ½" larger diameter than the casing O.D. across all water zones.

3. An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement.

4. An adequate number of casing centralizers will be run through usable water zones to ensure that the casing is centralized through these zones. The adequate number of centralizers to use will be determined by API SPEC 10D.

5. Centralizers will impart a swirling action around the casing and will be used just below and into the base of the lowest usable water zone.

6. A chronological log will be kept recording the pump and slurry information and will be sent to the BLM with the subsequent sundry.

Cementing Program

Well Name:	Florance GC J #3S		
Location:	Sec 06 - 30N - 09W, 1115' FSL, 825' FEL	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Fruitland Coal
		KB Elev (est)	6522
		GL Elev. (est)	6511

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)
Surface	200	12.25	8 5/8	8rd	Surface
Production -	3339	7.875	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
0 - SCP	Water/Spud	8.6-9.2
SCP - TD	Water/LSND	8.6-9.2

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	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

Surface:

Preflush	20 bbl.	FreshWater	
Slurry 1	130 sx Class C Cement		165 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)		
			0.4127 cuft/ft OH

Slurry Properties:	Density (lb/gal)	Yield (ft3/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

Cementing Program

Production:

Fresh Water	10 bbl	CW100	
Lead	298 sx	Class "G" Cement	777 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+ 2% S1 Calcium Chloride	
		+1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam'	
Tail	111 sx	50/50 Class "G"/Poz	141 cuft
Slurry 2		+ 2% gel (extender)	
500 ft fill		0.1% D46 antifoam	0.2009 cuft/ft OH
		+1/4 #/sk. Cellophane Flake	0.1733 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

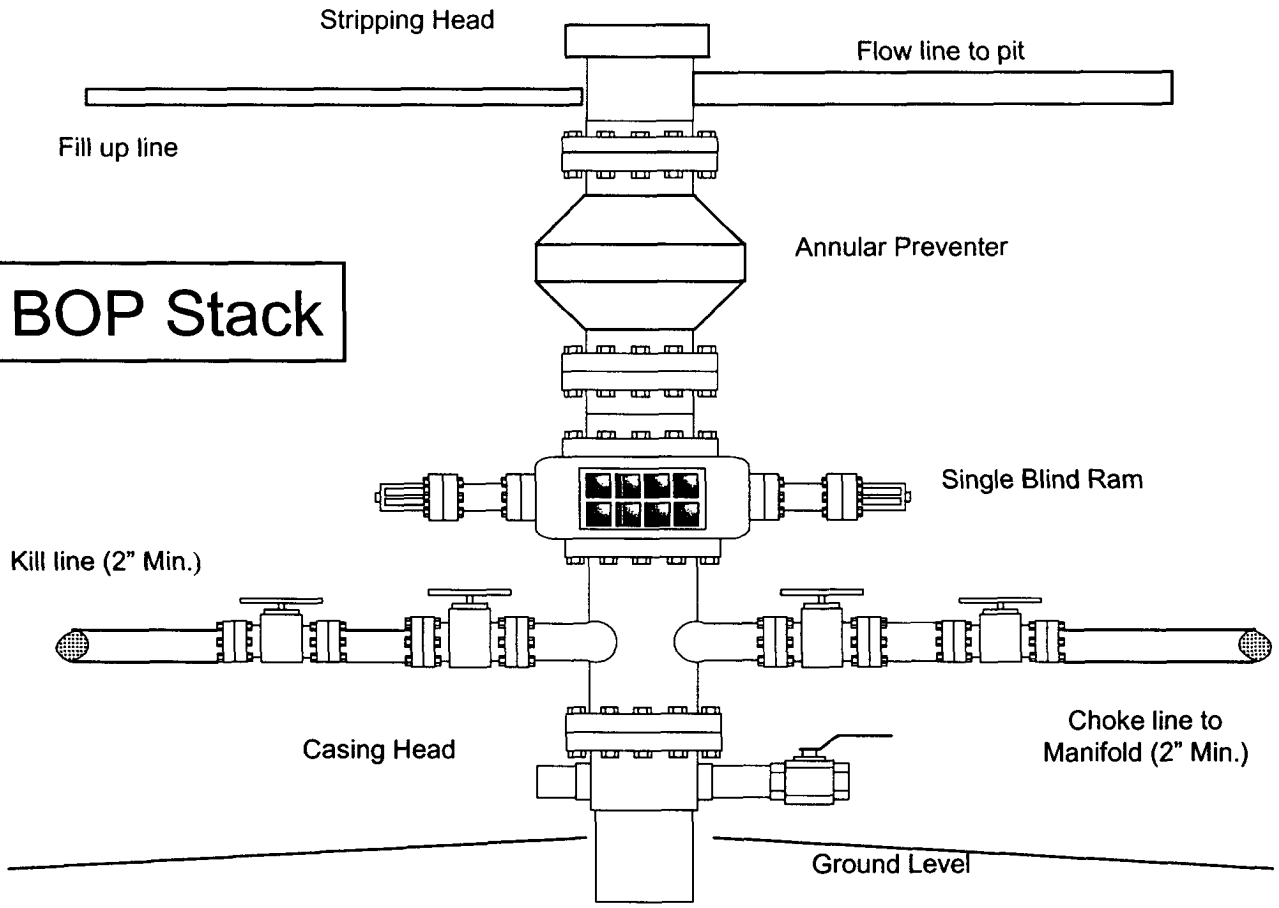
Casing Equipment:

5 1/2", 8R, ST&C
1 Float Shoe (autofill with minimal LCM in mud)
1 Float Collar (autofill with minimal LCM in mud)
Centralizers as needed
1 Top Rubber Plug
1 Thread Lock Compound

BP American Production Company

Well Control Equipment Schematic

BOP Stack



Choke & Kill Manifold