

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

5. Lease Serial No.
SF - 077833

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

FLORANCE 2B

9. API Well No.

30-045-33140

10. Field and Pool, or Exploratory

Blanco Mesaverde

11. Sec., T., R., M., or Blk. and Survey or Area

I 20 T 30N R 09W

12. County or Parish

SAN JUAN

13. State

NEW MEXICO

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator

BP AMERICA PRODUCTION COMPANY

3a. P.O. Box 3092

Street Address

HOUSTON, TX 77079-2064

3b. Phone No. (include area code)

281-366-4081

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

At surface

2045' FSL 700' FEL NE SE Lat. 36.7956 Long. 107.7964

At proposed prod. zone

14. Distance in miles and direction from the nearest town or post office*

11.7 MILES EAST FROM AZTEC, NM

15. Distance from proposed*
location to nearest
property or lease line, ft.

Also to nearest drlg. unit line, if any)

700'

16. No. of acres in lease

320

17. Spacing Unit dedicated to this well

320

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

19. Proposed Depth

5451'

20. BLM/ BIA Bond No. on file

WY2924

21. Elevations (Show whether DF, RT, GR, etc.)

6104'

GR

22. Approximate date work will start*

7/13/2005

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:

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 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

Title

Cherry Hlava

Date

6/1/2005

Regulatory Analyst

Approved By (Signature)

Jim Lovato

Title

Field Manager - Min

Name (Printed/ Typed)

Office

Date

8/22/05

Application approval 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.

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 page 2)

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		2 Pool Code 72319		3 Pool Name Blanco Mesaverde	
4 Property Code 000518		5 Property Name Florance			6 Well Number # 2B
7 OGRID No. 000778		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 6104

10 Surface Location

UL or Lot No. I	Section 20	Township 30 N	Range 9 W	Lot Idn	Feet from the 2045	North/South line SOUTH	Feet from the 700	East/West line EAST	County SAN JUAN
--------------------	---------------	------------------	--------------	---------	-----------------------	---------------------------	----------------------	------------------------	--------------------

11 Bottom Hole Location If Different From Surface

12 UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County				
<table border="1"> <tr> <td>13 Dedicated Acres 320</td> <td>14 Joint or Infill</td> <td>15 Consolidation Code</td> <td>16 Order No.</td> </tr> </table>										13 Dedicated Acres 320	14 Joint or Infill	15 Consolidation Code	16 Order No.
13 Dedicated Acres 320	14 Joint or Infill	15 Consolidation Code	16 Order No.										

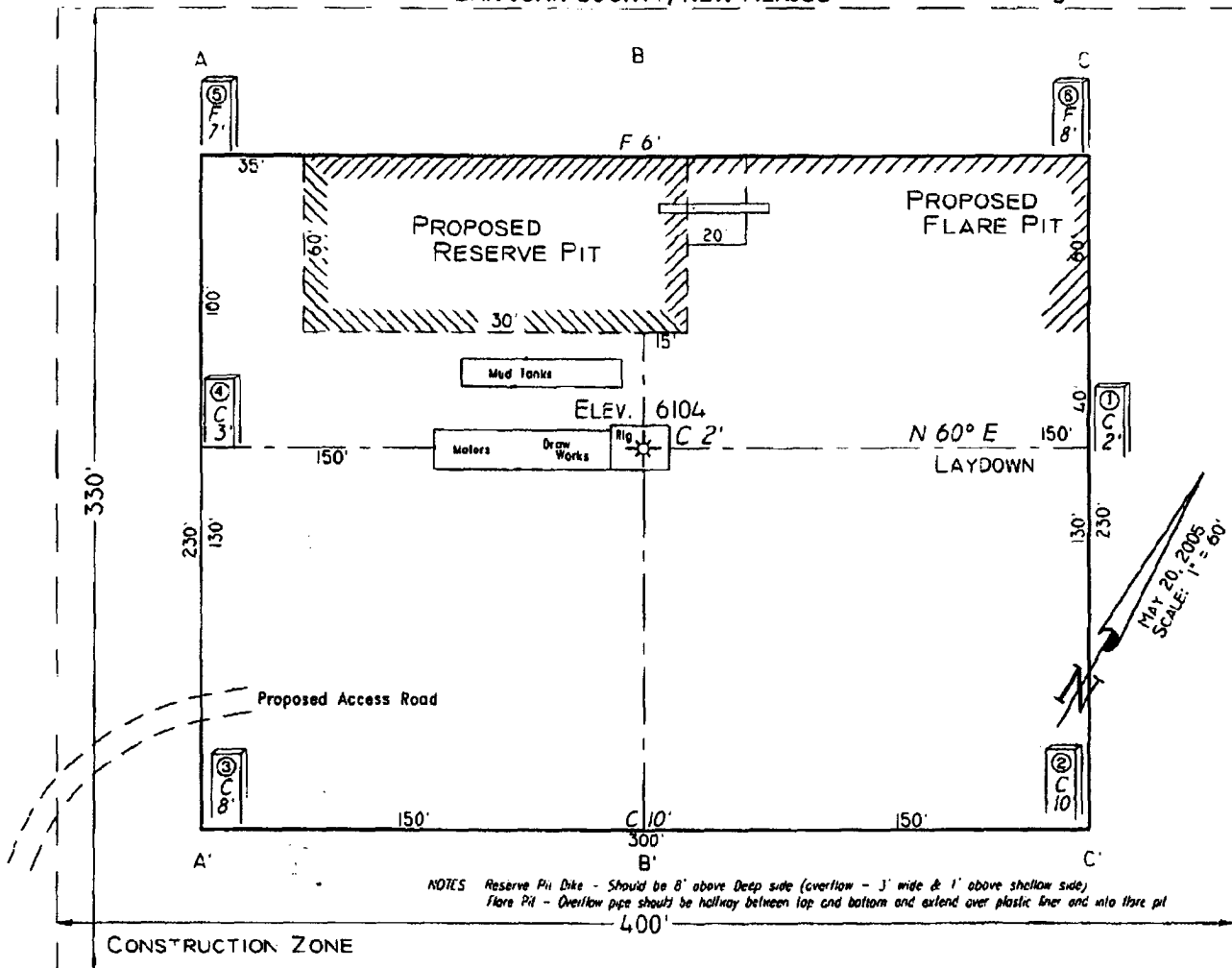
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

			<p>17 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 Cherry Hlava Printed Name Regulatory Analyst Title 6-1-05 Date</p>
	<p>18 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>Restaked: May 20, 2005 July 15, 2004</p> <p>Date of Survey Signature and Seal of Professional Surveyor </p> <p>7016 Certificate Number</p>		

PAD LAYOUT PLAN & PROFILE
 BP AMERICA PRODUCTION COMPANY
 Florance # 2B
 2045' F/SL 700' F/EL
 SEC. 20, T30N, R9W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

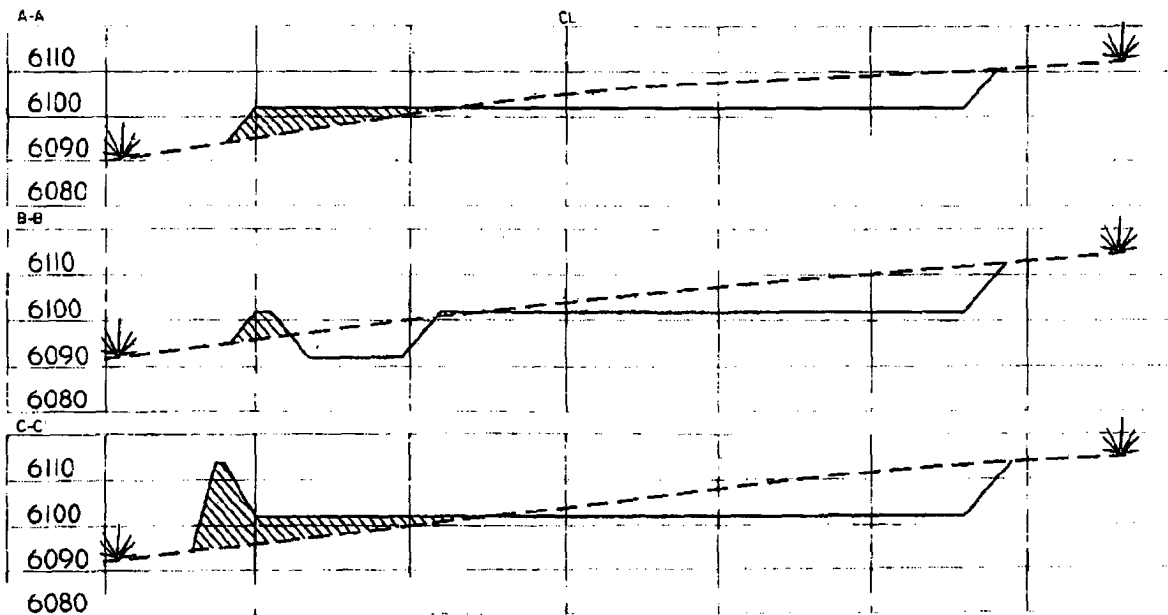
Lat: 36.7956°
 Long: 107.7964°

Lat: 36°47'44"
 Long: 107°47'49"



Area of Construction Zone - 330'x400' or 302 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

DRILLING AND COMPLETION PROGRAM

Lease:	Florance	Well Name & No.	Florance #2B	Field:	Blanco Mesaverde
County:	San Juan, New Mexico	Surface Location:	20-30N-9W : 2045' FSL, 700' FEL		
Minerals:	State	Surface:	Lat: 36.7954801 Long:-107.7964716		
Rig :	Aztec 507	BH Location:	SAME		

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER				
TYPE OF TOOLS	DEPTH OF DRILLING	Actual GL:	6104	Estimated KB: 6,115.0'		
Rotary	0 - TD	Marker		SUBSEA	TVD	APPROX. MD
LOG PROGRAM		Ojo Alamo		4,492'	1,623'	1,623'
Type	Depth Interval	Kirtland		4,404'	1,711'	1,711'
Single Run		Fruitland	*	3,922'	2,193'	2,193'
		Fruitland Coal	*	3,546'	2,569'	2,569'
		Pictured Cliffs	*	3,316'	2,799'	2,799'
		Lewis	*	3,048'	3,067'	3,067'
Cased Hole		Cliff House	#	1,793'	4,322'	4,322'
TDT- CBL	TD to 7" shoe.	Menefee	#	1,481'	4,634'	4,634'
	Identify 4 ½" cement top	Point Lookout	#	1,064'	5,051'	5,051'
REMARKS:		Mancos		724'	5,391'	5,391'

- Please report any flares (magnitude & duration).

TYPE	FREQUENCY	DEPTH		FREQUENCY	DEPTH
	none	2,519'	to TD	Geolograph	0 - TD

Interval	TypeMud	#/gal	Vis, sec/qt	/30 min	Other Specification
200' - 285'	Spud	8.8 - 9.0	Sufficient to clean hole.		
2,519'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
5,451'	Air	1	1000 cfm for bit		Volume sufficient to maintain a stable and clean wellbore

CasingString	Depth	Size	Casing Size	Grade, Thread	Weight	Landing Point	Cement
Surface/Conductor	2005	13 1/2"	9-5/8"	H-40 ST&C	32#		cmt to surface
Intermediate 1	2,519'	8-3/4"	7"	J/K-55 ST&C	20#	50' above FT coal	cmt to surface
Production	5,451'	6-1/4"	4-1/2"	J-55	11.6#	DKOT	150' inside Intermediate - TOC survey required

None

Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead

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

Formation	Depth	Anticipated bottom hole pressure	Max anticipated surface pressure**
Cliffhouse	4,322'	500	0
Point Lookout	5,051'	600	0

** Note: Determined using the following formula: $ABHP - (.22 \times TVD) = ASP$

Form 46 Reviewed by:		Logging program reviewed by:			
PREPARED BY:		APPROVED:		DATE:	APPROVED:
HGJ	JMP			2/24/2005 Revised 5/23/200	
Form 46 7-84bw		For Drilling Dept.			For Production Dept.

Cementing Program

Well Name: Florance 2B
 Location: 20-30N-09W : 2045' FSL, 700' FEL
 County: San Juan
 State: New Mexico

Well Flac
 Formation: Mesa Verde
 KB Elev (est) 6115
 GL Elev. (est) 6104

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	200	13.5	9.625	ST&C	Surface	NA	
Intermediate	2519	8.75	7	ST&C	Surface	NA	
Production -	5451	6.25	4.5	ST&C	2419	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	3370	1400	254	0.0787	8.845
Intermediate		7	20 K-55	3740	2270	254	0.0405	6.456
Production -		4.5	11.6 J-55	5350	4960	154	0.0155	3.875

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	Recommended Mud Properties Prio Cementing:
			PV <20 YP <10 Fluid Loss <15
0 - SCP	Water/Spud	8.6-9.2	
SCP - ICP	Water/LSND	8.6-9.2	
ICP - ICP2	Gas/Air Mist	NA	
ICP2 - TD	LSND	8.6 - 9.2	

Cementing Program:

	Surface	Intermediate	Production
Excess %, Lead	100	75	40
Excess %, Tail	NA	0	40
BHST (est deg. F)	75	120	183
Special Instructions	1,6,7	1,6,8	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. Fresh Water

Slurry 1 154 sx Class C Cement 195 cuft
 TOC@Surface + 2% CaCl2 (accelerator)

0.4887 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:

9-5/8", 8R, ST&C
 1 Guide Shoe
 1 Top Wooden Plug

Additional Operator Remarks
Florance 2B
APD

Notice of Staking was submitted on 06/02/05

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 5451' and complete into the Blanco Mesaverde..

If terrain allows 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.

SUPPLEMENTAL TO SURFACE USE PLAN

New Facilities:

A 4.5" diameter buried steel pipeline that is +/- 400 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 Field Services.

APD/ROW

C. HARRADEN/ June 6, 2005 *CEK*

BP AMERICA PROD. CO./ Florance #2B *CEK*

STIPULATION/CONDITION OF APPROVAL

This well is located in an area where the San Jose fresh water aquifer is shallow. In order to protect the integrity of this aquifer, a minimum surface csg. depth of 285' is stipulated as a condition of approval for this APD.

**SAN JUAN BASIN
Mesaverde Formation
Pressure Control Equipment**

Background

The objective Mesaverde 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 Blanco Mesaverde. No abnormal temperature, pressure, or H₂S anticipated.

Equipment Specification

Interval

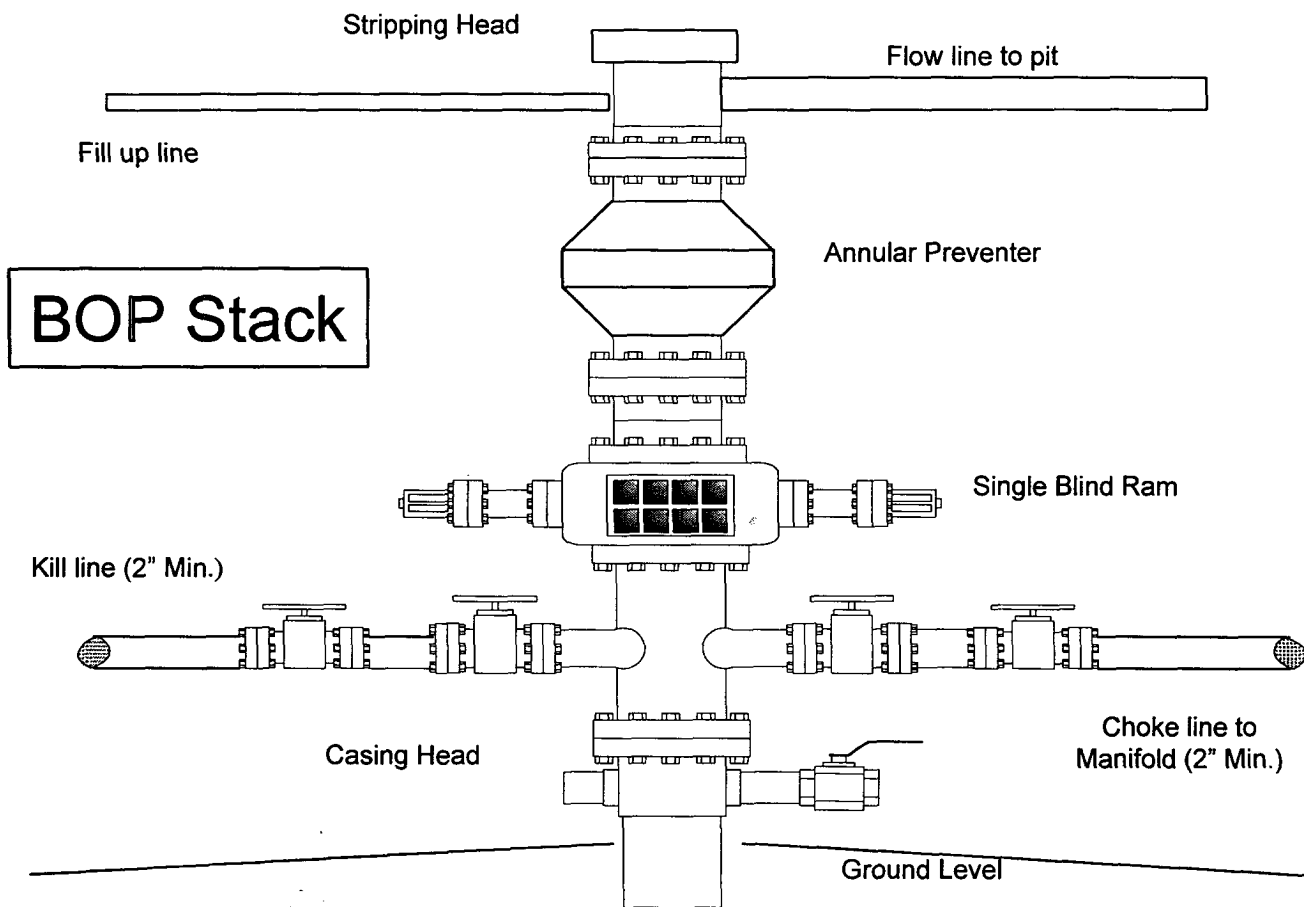
BOP Equipment

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.

BP American Production Company

Well Control Equipment Schematic



Choke & Kill Manifold

