

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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. NMNM-04202 NMSF077123
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: MARY CORLEY E-Mail: corleyml@bp.com		8. Lease Name and Well No. WARREN LS 2C
3a. Address P.O. BOX 3092 HOUSTON, TX 77253	3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700	9. API Well No. 30045 32177
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESW Lot M 655FSL 985FWL 36.40300 N Lat, 107.44700 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BLANCO MESAVERDE
14. Distance in miles and direction from nearest town or post office* 16.85 MILES FROM BLOOMFILED, NEW MEXICO		11. Sec., T., R., M., or Blk. and Survey or Area Sec 12 T28N R9W Mer NMP M
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 665	16. No. of Acres in Lease 269.88	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 765	19. Proposed Depth 4863 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5824 GL	22. Approximate date work will start 03/20/2004	17. Spacing Unit dedicated to this well 269.88 A11
		20. BLM/BIA Bond No. on file WY2924
		23. Estimated duration 5 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) MARY CORLEY	Date 02/16/2004
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) 	Name (Printed/Typed)	Date 8-9-04
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.

Additional Operator Remarks (see next page)

Electronic Submission #27938 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the FarmingtonALL ACTIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

** 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 30-045-32177	² Pool Code 72319	³ Pool Name Blanco Mesavende
⁴ Property Code 001212	⁵ Property Name Warren LS	⁶ Well Number # 2C
⁷ OGRID No. 000778	⁸ Operator Name BP AMERICA PRODUCTION COMPANY	⁹ Elevation 5824

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
M	12	28 N	9 W		665	SOUTH	985	WEST	SAN JUAN

Bottom Hole Location If Different From Surface

¹¹ 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 269.88	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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



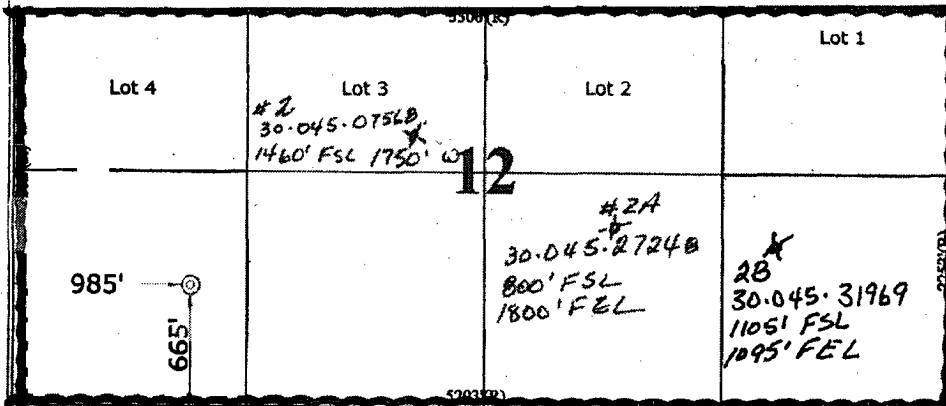
17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Mary Corley*
Printed Name: **Mary Corley**
Title: **Regulatory Analyst**
Date: **08-16-2004**

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.

November 5, 2003
Date of Survey

Signature and Seal of Professional Surveyor
GARY D. VANN
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
7016
Certificate Number



Additional Operator Remarks:

Notice of Staking Submitted 08/11/2003.

BP America Production Company respectfully request permission to drill the subject well to a total depth of approximately 4863' and complete in the Blanco Mesaverde Pool.

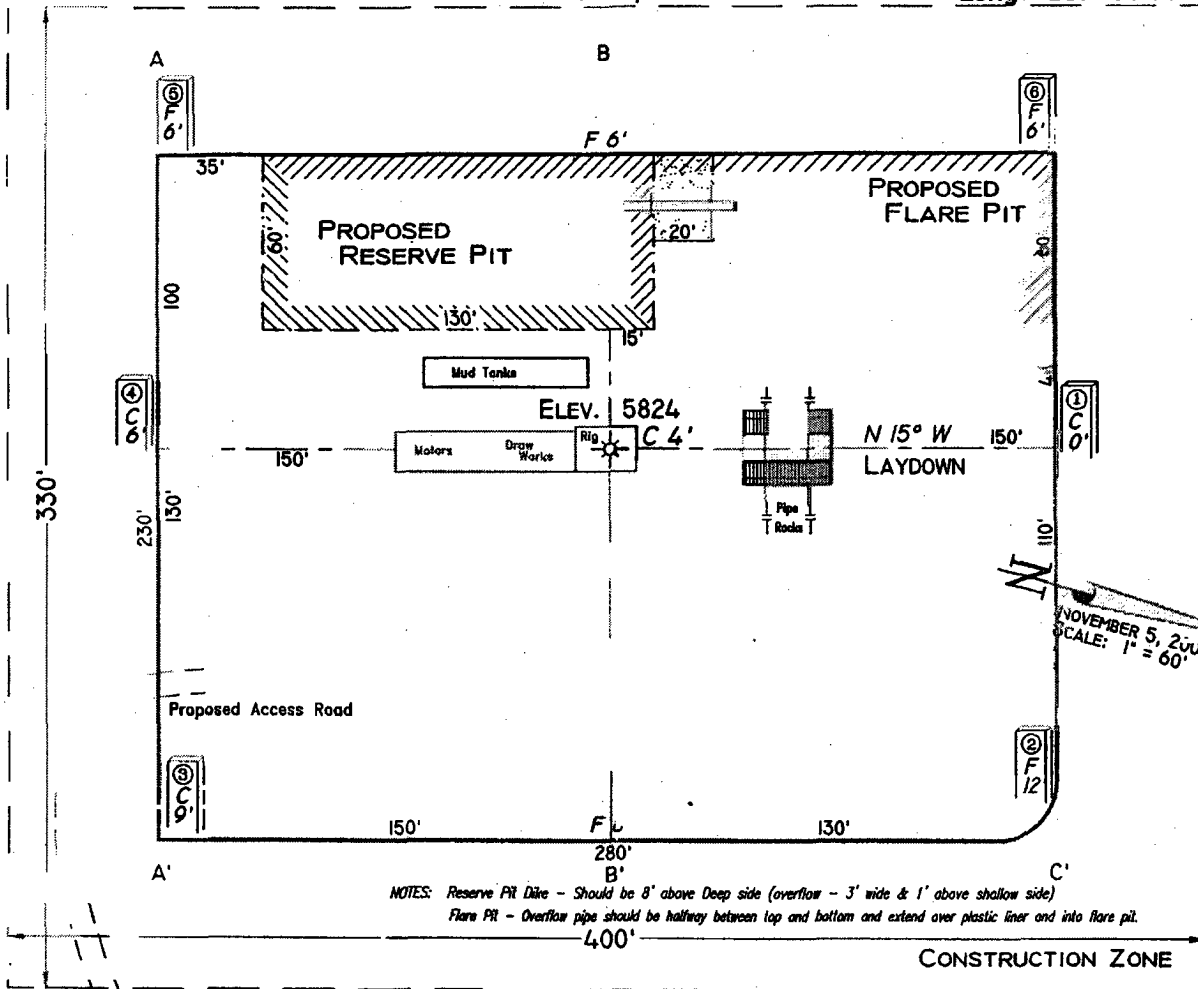
As an alternate to the drilling of the surface hole with drilling mud as stated on the attached Form 46, BP request permission to either drill with drilling mud or with air/air mist. Additionally, BP request as a possible alternate to the cementing of the surface casing to be either the cementing program stated on the attachment or with approximately 90 CU/FT TYPE I-II, 20% FLYASH, 14.5 PPG, 7.41 GAL/SK, 1.61 CF/SK YIELD, 80 DEG BHST READY MIX CMT.

SUPPLEMENTAL TO SURFACE USE PLAN**New facilities:**

A 4 1/2" diameter buried steel pipeline that is + or 800 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 well 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 to El Paso Field Services, refer to the attached survey plat.

PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
Warren LS #2C
665' F/SL 985' F/WL
SEC. 12, T28N, R9W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

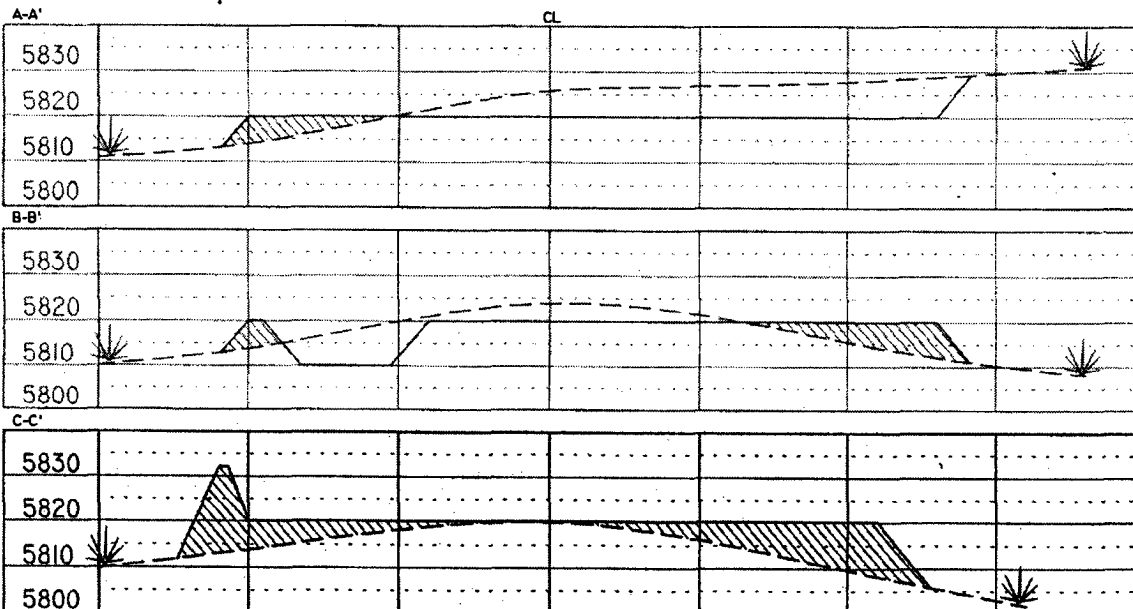
Lat: 36°40'16"
Long: 107°44'44"



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'x400' or 3.03 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**

Prospect Name: Warren LS
Lease: Warren
County: San Juan
State: New Mexico
Date: February 13, 2004

Well No: 2 C
Surface Location: 12-28N-9W; 665 FSL, 985 FWL
Field: Blanco Mesaverde

OBJECTIVE: Drill 400' below the top of the Point Lookout Sandstone, set 2 7/8" production longstring, Stimulate CH, MF and PL intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 5824		Estimated KB: 5838	
Rotary	0 - TD				
LOG PROGRAM		MARKER		SUBSEA	TVD
TYPE	DEPTH INVERAL	Ojo Alamo		4566	1272
<u>OPEN HOLE</u>		Kirtland		4512	1326
None		Fruitland		4116	1722
		Fruitland Coal	*	3842	1996
		Pictured Cliffs	*	3622	2216
		Lewis	*	3460	2379
<u>CASED HOLE</u>		Cliff House	#	2212	3626
GR-CCL-CBL	TD to 5 1/2" shoe	Menefee	#	1891	3947
		Point Lookout	#	1375	4463
		Mancos		1007	4831
REMARKS: - Please report any flares (magnitude & duration).		TOTAL DEPTH		975	4863
		# Probable completion interval		* Possible Pay	
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH
None		None	Production hole	Geograph	0-TD
REMARKS:					

MUD PROGRAM:

Approx. Interval	Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120	Spud	8.6-9.2			
120 - 1946 (1)	Water/LSND	8.6-9.2		<6	
1946 - 4863	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	120	8 5/8"	X-42 ST&C	20#	12.25"	1
Intermediate 1	1946	5 1/2"	J -55 ST&C	15.5#	7.875"	1,2
Production	4863	2 7/8"	J-55	6.5#	4.75"	3,4

REMARKS:

- (1) Circulate Cement to Surface
- (2) Set casing 50' above Fruitland Coal
- (3) Bring cement 100' above 5 1/2" shoe
- (4) 100' Overlap

CORING PROGRAM:

None

COMPLETION PROGRAM:

Rigless, 2-3 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:

HGJ/MNP/JMP

February 13, 2004
Version 2.0

Form 46 12-00 MNP

BOP Test Pressure

BP America Production Company BOP Pressure Testing Requirements

Well Name: Warren LS
County: San Juan

2 C
State: New Mexico

Formation	Estimated TVD/MD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1272		
Fruitland Coal	1996		
PC	2216		
Lewis Shale	2379		
Cliff House	3626	500	0
Menefee Shale	3947		
Point Lookout	4463	600	0
Mancos	4831		

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

Requested BOP Pressure Test Exception: 750 psi

**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 rigs 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 Mesaverde. No abnormal temperature, pressure, or H2S anticipated.

Equipment Specification

Interval

BOP Equipment

Below conductor casing to total depth	9", 11" nominal or 7 1/16", 3000 psi double ram preventer with rotating head.
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All ram type preventers and related control equipment will be hydraulically tested to 250 psi (low pressure) and 750 psi (high pressure), upon installation, following any repairs or equipment replacements, or at 30 day intervals. Accessories to BOP equipment will include kelly cock with a handle available, floor safety valves and choke manifold which will also be tested to equivalent pressure.

FEDERAL CEMENTING REQUIREMENTS

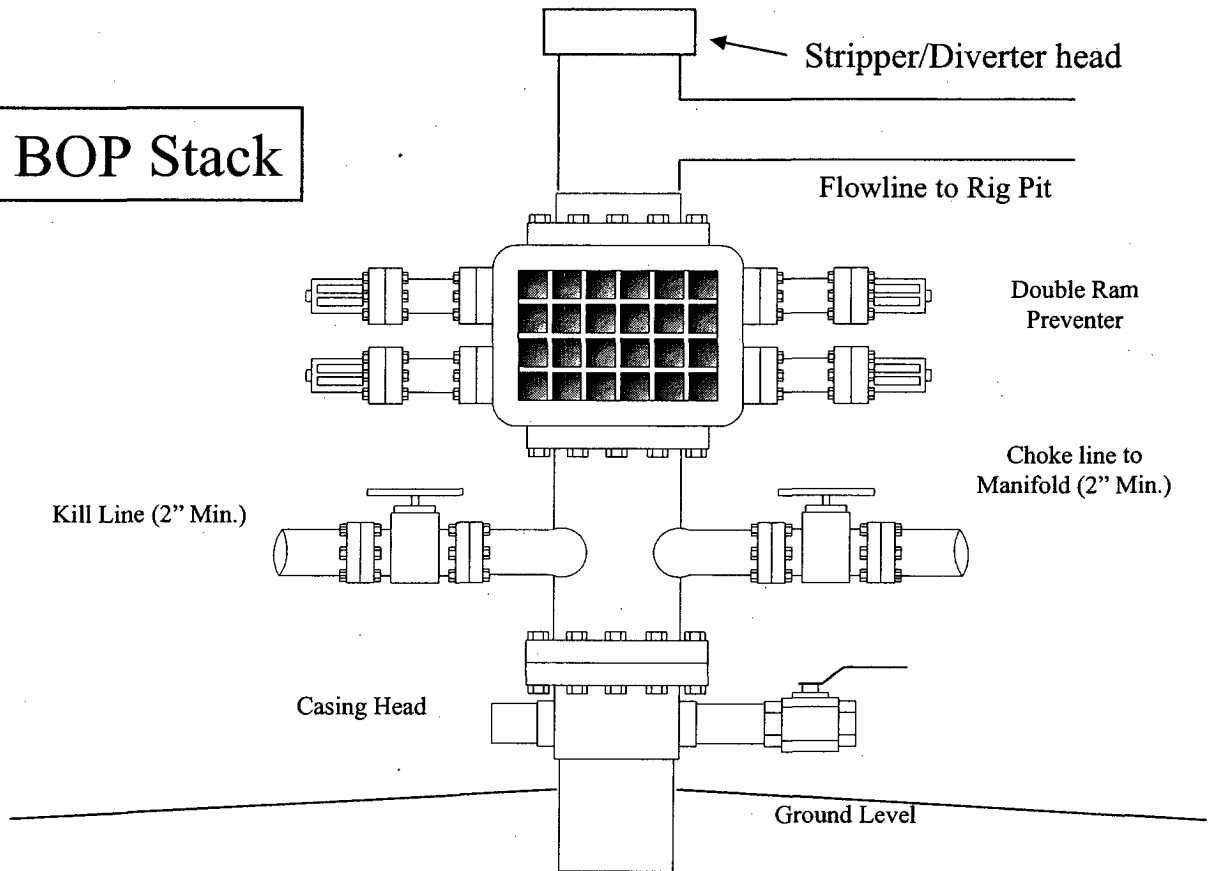
1. All permeable zones containing fresh water and other usable water containing 10,000 PPM or less total dissolved solids will be isolated and protected from contamination by cement circulated in place for the protection of permeable zones per the NTL-FRA 90-1 Section III A.
2. The hole size will be no smaller than 1 1/2" 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 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.

BP American Production Company

Well Control Equipment Schematic



BOP Stack



Choke & Kill Manifold

