

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

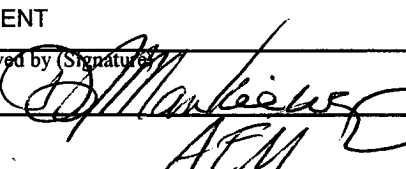
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM - 012647
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: CHERRY HLAVA E-Mail: HLAVACL@BP.COM		8. Lease Name and Well No. RIDDLE B 3 S
3a. Address HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281.366.4081	9. API Well No. 30-045-32827
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESE Lot 16 870FSL 730FEL 36.87889 N Lat, 107.76139 W Lon At proposed prod. zone SESE Lot 16 870FSL 730FEL 36.87889 N Lat, 107.76139 W Lon		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* 23.5 MILES N/E FROM AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 22 T31N R09W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 730	16. No. of Acres in Lease 313.68	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3060 MD 3060 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6202 GL	22. Approximate date work will start 02/15/2005	17. Spacing Unit dedicated to this well E2
		20. BLM/BIA Bond No. on file WY2924
		23. Estimated duration 7

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 (Electronic Submission)	Name (Printed/Typed) CHERRY HLAVA Ph: 281.366.4081	Date 01/11/2005
Title AGENT		
Approved by (Signature) 	Name (Printed/Typed) AEM	Date 6-16-05
Title AEM	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 #52891 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

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".

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

NMOCD

District I
PG&B 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

API Number 30-045-32827	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 07421974	Property Name Riddle B	Well Number # 3S
GORID No. 000778	Operator Name BP AMERICA PRODUCTION COMPANY	Elevation 6202

10 Surface Location

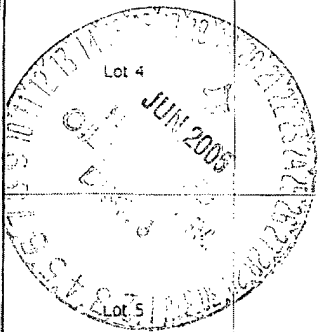
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Lot 16 (P)	22	31 N	9 W		870	SOUTH	730	EAST	SAN JUAN

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
313.68			

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

	Lot 4	Lot 3	Lot 2	Lot 1
	Lot 5	Lot 6	Lot 7	Lot 8
	Lot 12	Lot 11	Lot 10	Lot 9
Lot 13	Lot 14	Lot 15	Lot 16	

22

730'

870'

5175 (ft)

5235 (ft)

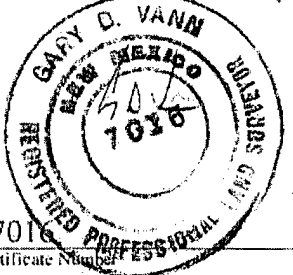
5260 (ft)

5247 (ft)

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
11-9-04
Date

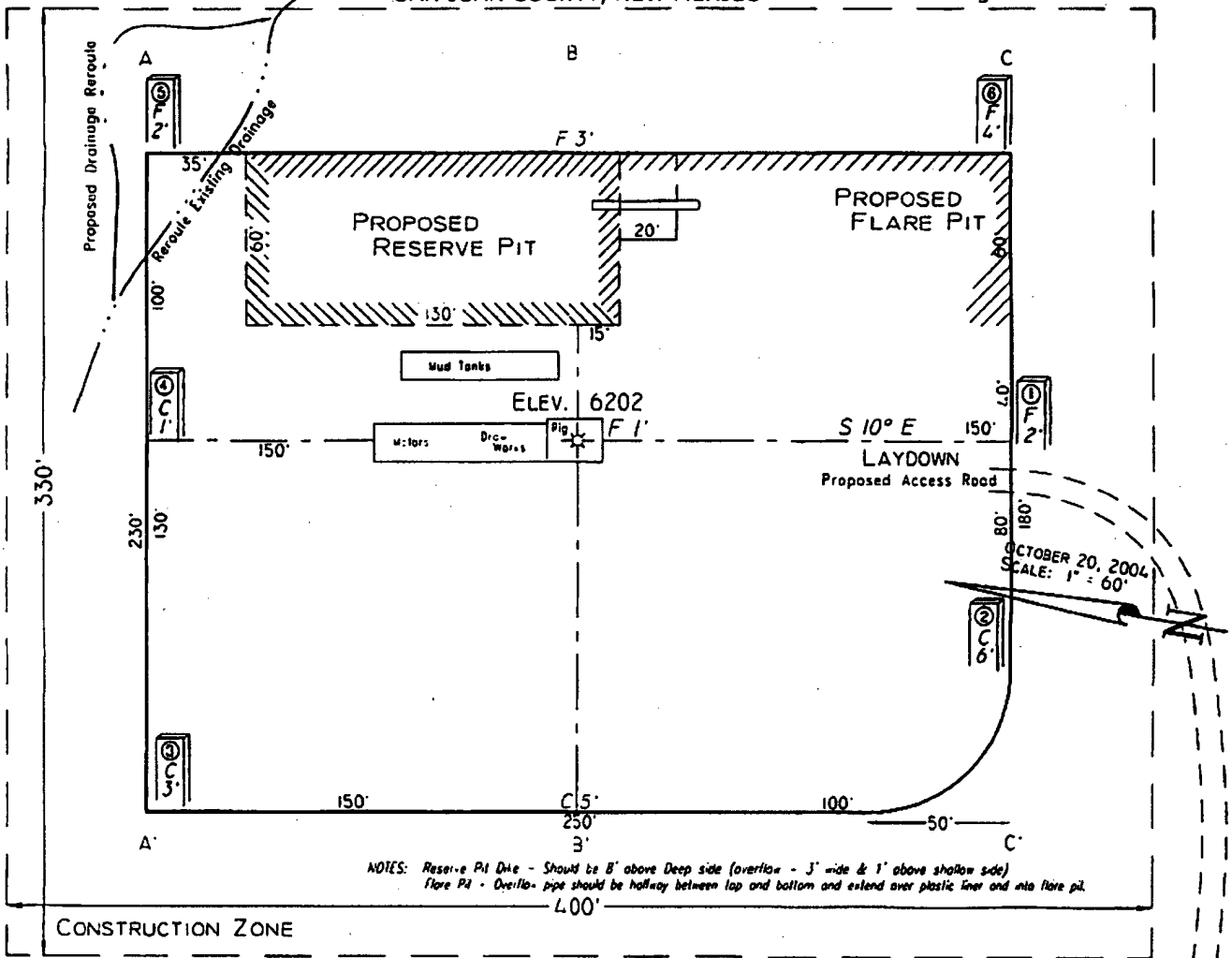
18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

October 20, 2004
Date of Survey
Signature and Seal of Professional Surveyor

7016
Certificate Number

PAD LAYOUT PLAN & PROFILE
 BP AMERICA PRODUCTION COMPANY
 Riddle B #3S
 870' F/SL 730' F/EL
 SEC. 22, T31N, R9W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

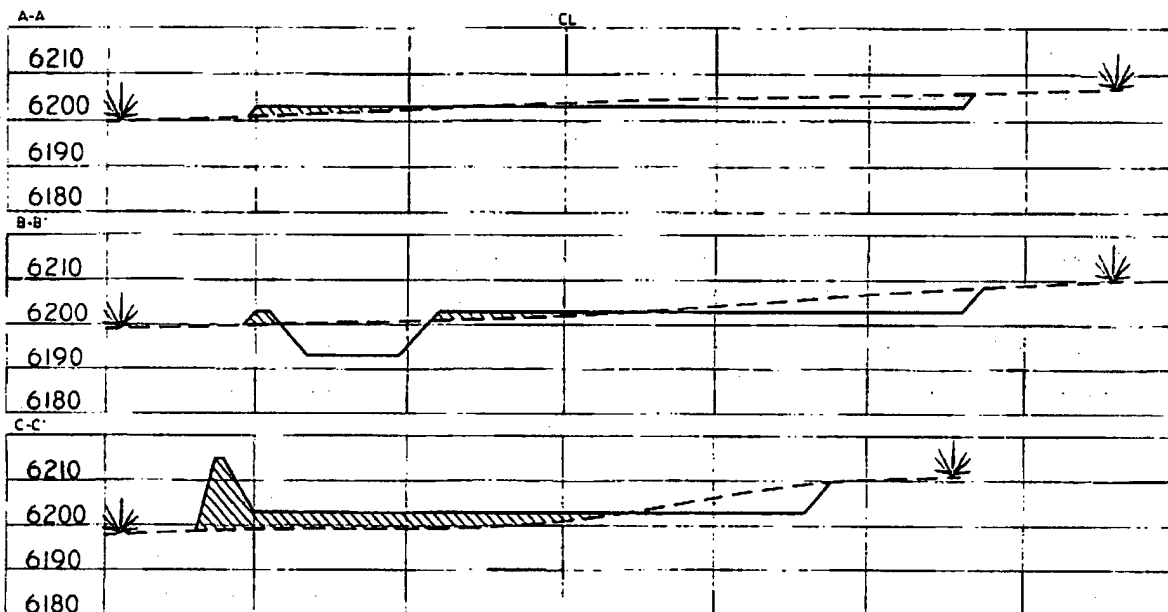
36.87889
 107.76139

Lat: 36°52'44"
 Long: 107°45'41"



Area of Construction Zone - 330'x400' or 303 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: Riddle B
Lease:

County: San Juan
State: New Mexico
Date: November 9, 2004

Well No: 3 S
Surface Location: Section 22P, T31N, R09W; 870'
FSL, 730' FEL
Field: Basin Fruitland Coal

OBJECTIVE: Drill to FT top, topset FT with 7" casing and air drill the Fruitland Coal interval, under-ream and set 5.5" liner.								
METHOD OF DRILLING				APPROXIMATE DEPTHS OF GEOLOGICAL MARKER				
TYPE OF TOOLS		DEPTH OF DRILLING		Estimated GL: 6202		Estimated KB: 6213		
Rotary		0 - TD						
LOG PROGRAM								
TYPE		DEPTH INTERVAL						
Mud log & gas chromatograph		7" csg set depth - TD						
(see Remarks section below).								
REMARKS: At TD and prior to completion of the Fruitland coal interval, the operator will FAX or email a copy of the mud log covering the lower basal Fruitland coal seam and Pictured Cliffs Formation to the FFO-PMT geologist (Chip Harraden @ 505-599- 8997 or chip_harraden@nm.blm.gov) as well as the BP geologist Dennis Hilkeiwich at hilkeiwich@bp.com, fax 281-366-7099. Note: It is very important that the mud log include gas chromatograph results.				MARKER		SUBSEA		MEAS. DEPTH
				Ojo Alamo		4465		1748
				Kirtland		4361		1852
				Fruitland		3500		2713
				Fruitland Coal		3381		2832
Pictured Cliffs		3151		3062				
				TOTAL DEPTH		3153		3060
				# Probable completion interval		* Possible Pay		
SPECIAL TESTS				DRILL CUTTING SAMPLES		DRILLING TIME		
TYPE				FREQUENCY DEPTH		FREQUENCY DEPTH		
None				none none		Geolograph 0-TD		
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 - 2817 (1)	Water/LSND	8.6-9.2		<6		
2817 - TD	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	9 5/8"	H-40, 8 RND	32.3	12.5"	1
Intermediate	2817	7"	J-55, 8 RND	20.0	8.75"	1
Production Liner	2767 - TD	5 1/2"	J-55, 8 RND	15.5	12.0"	2
REMARKS:						
(1) Circulate Cement to Surface						
(2) Under-ream hole interval to 12.0"						
CORING PROGRAM:						
None						
COMPLETION PROGRAM:						
Run 5.5" liner. Perforate coal intervals (depths based on mud log and correlations). Run 2-3/8" tubing.						
GENERAL REMARKS:						
Notify BLM/NMOCDD 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:		

Form 46 12-00 MNP

Additional Operator Remarks
Riddle B 3S
APD

BP America Production Company respectfully requests permission to drill the subject well to a total MD of approximately 3060' and complete in the Basin Fruitland Coal.

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 +/- 900 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

BOP Test Pressure

BP America Production Company BOP Pressure Testing Requirements

Well Name: Riddle B 3S

County: San Juan

State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1748	250	0
Kirtland	1852		
Fruitland Coal	2832		
PC	3062		
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

Cementing Program

Well Name: Riddle B 3 S Location: Sec 22 - 31N - 9W, 870' FSL, 730' FEL County: San Juan State: New Mexico	Field: Basin Fruitland Coal API No. Well Flac Formation: Fruitland Coal KB Elev (est) 6213 GL Elev. (est) 6202
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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	120	12.5	9.625	ST&C	Surface	NA	
Production -	2817	8.75	7	LT&C	Surface	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
Production -		7	20 K-55		3740	2270	234	0.0405

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	Recommended Mud Properties Prio Cementing:
			PV <20
			YP <10
0 - SCP	Water/Spud	8.6-9.2	Fluid Loss <6
SCP - TD	Water/LSND	8.6-9.2	
SCP - TD	Gas/Air/N2/Mist	NA	

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	66 sx Class C Cement		83 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)		
			0.347 cuft/ft OH

Slurry Properties:	Density (lb/gal)	Yield (ft3/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
- 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
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Cementing Program

Lead		185 sx Class "G" Cement	483 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+ 2% S1 Calcium Chloride	
		+1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam	
Tail		83 sx 50/50 Class "G"/Poz	105 cuft
Slurry 2		+ 2% gel (extender)	
500 ft fill		0.1% D46 antifoam	0.1503 cuft/ft OH
		+1/4 #/sk. Cellophane Flake	0.1746 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:	7", 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

**SAN JUAN BASIN
Basin Fruitland Coal
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 Basin 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", 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

