

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

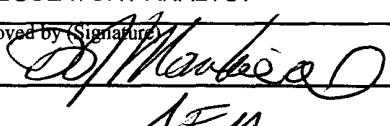
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM - 012202
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BP AMERICA PRODUCTION COMPANY Contact: CHERRY HLAVA E-Mail: HLAVACL@BP.COM		7. If Unit or CA Agreement, Name and No.
3a. Address HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281.366.4081	8. Lease Name and Well No. BOLACK B 8 N
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SWNW 1910FNL 1180FWL 36.61972 N Lat, 107.69139 W Lon At proposed prod. zone SWNW 1910FNL 1180FWL 36.61972 N Lat, 107.69139 W Lon		9. API Well No. 30-045-32795
14. Distance in miles and direction from nearest town or post office* 21 MILES S/E FROM BLOOMFIELD, NM		10. Field and Pool, or Exploratory BASIN DK & BLANCO MV
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 320.00	11. Sec., T., R., M., or Blk. and Survey or Area Sec 33 T28N R08W Mer NMP E
17. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 100	18. Proposed Depth 6745 MD 6745 TVD	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5906 GL	22. Approximate date work will start 02/20/2004	13. State NM
23. Estimated duration 7		17. Spacing Unit dedicated to this well 320.00 N/S
20. BLM/BIA Bond No. on file WY2924		

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 12/31/2004
Title REGULATORY ANALYST		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 4-22-05
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.

Additional Operator Remarks (see next page)

Electronic Submission #52463 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 **

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 30-045-32795		2 Pool Code 71599; 72319		3 Pool Name Basin Dakota; Blanco Mesaverde		
4 Property Code 000325		5 Property Name Bolack B			6 Well Number # 8N	
7 OGRID No. 000778		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 5906	

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
E	33	28 N	8 W		1910	NORTH	1180	WEST	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 320	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: <u>Cherry Hlava</u> Printed Name: <u>Cherry Hlava</u> Title: <u>Regulatory Analyst</u> Date: <u>12-21-04</u>	
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. Date of Survey: <u>September 16, 2004</u> Signature and Seal of Professional Surveyor:					
Certificate Number: <u>7016</u>					

(R) - CLO Record

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
May 27, 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 Bolack B (APD filed with BLM NM 012202)	
8. Well Number 8 N	
9. OGRID Number 000778	
10. Pool name or Wildcat Basin Dakota & Blanco Mesaverde	

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 COMPANY

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

4. Well Location

Unit Letter E : 1910 feet from the North line and 1180 feet from the West line
Section 33 Township 28N Range 08W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5906'

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type DRILLING Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >1000'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material IMPERVIOUS

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 COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: LINED DRILLING PIT ☒

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.

Construct a lined drilling pit per BP America – San Juan Basin Drilling/ Workover 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 12/31/2004

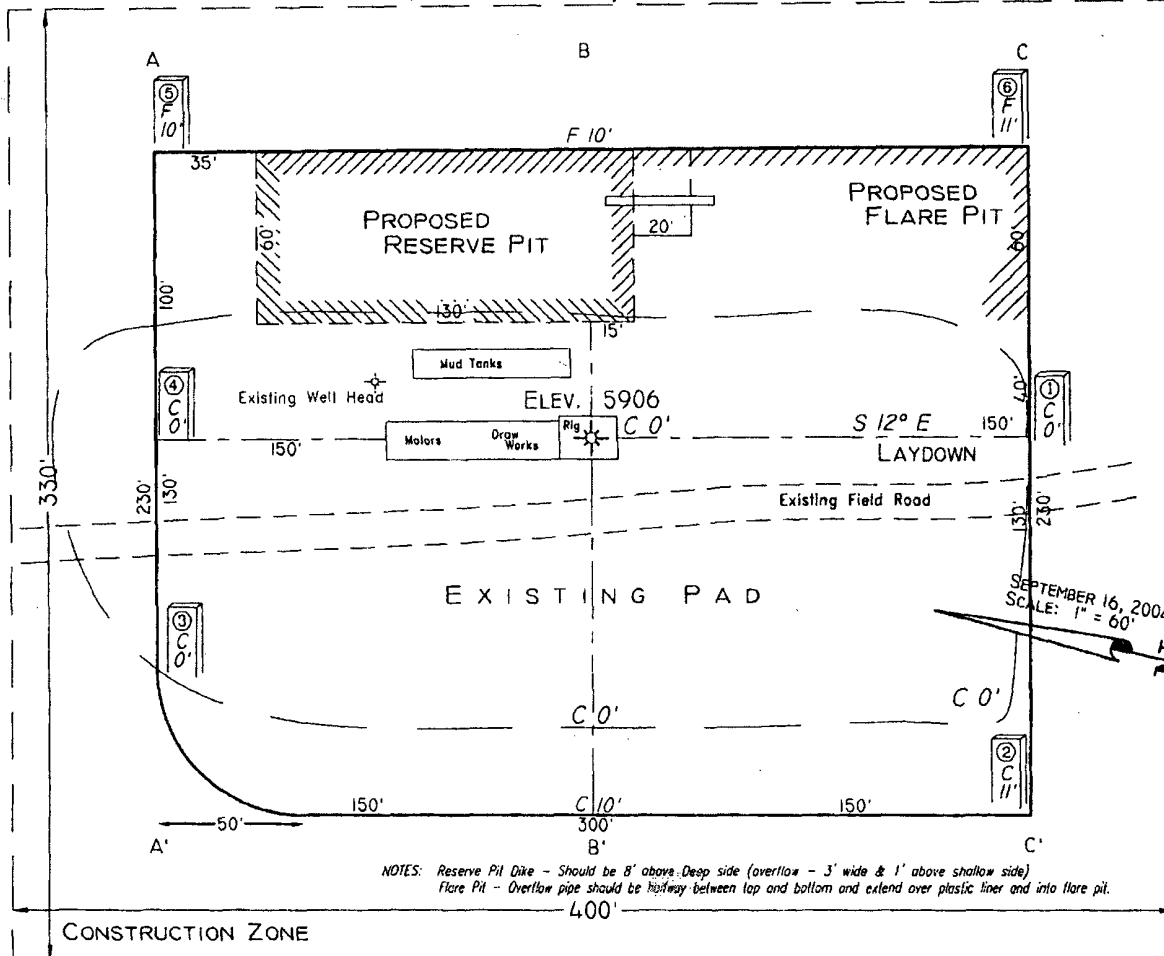
Type or print name Cherry Hlava E-mail address: hlavacl@bp.com Telephone No. 281-366-4081

For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 88 DATE APR 25 2005
Conditions of Approval (if any): _____

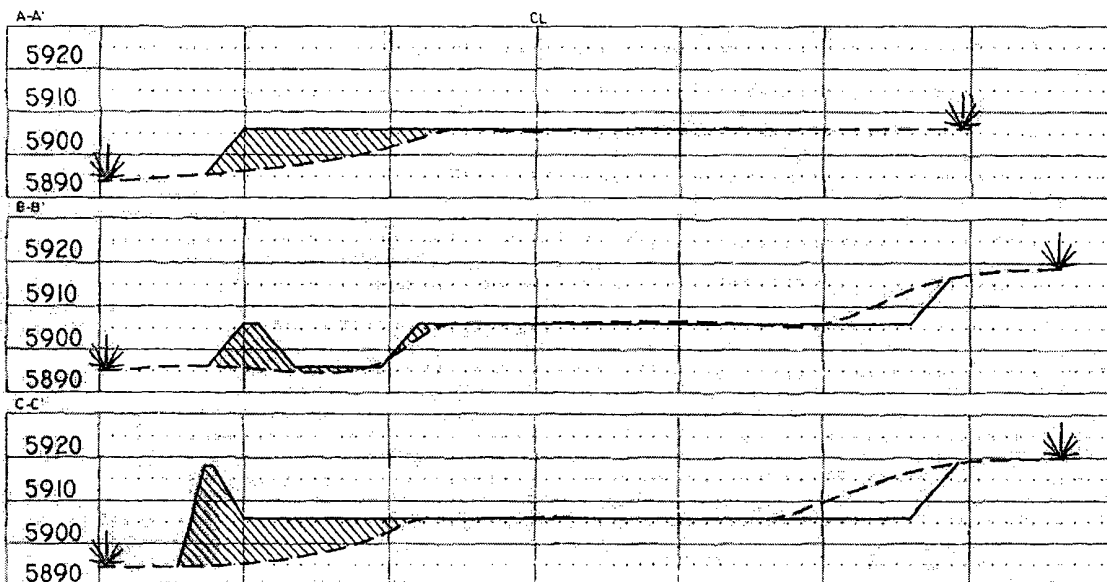
PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 Bolack B # 8N
 1910' F/NL 1180' F/WL
 SEC. 33, T28N, R8W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°37'11"
 Long: 107°41'29"



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											
10/11/2004											
Lease: Bolack B		Well Name & No. Bolack B #8N		Field: Blanco Mesaverde/Basin Dakota							
County: San Juan, New Mexico		Surface Location: 33-28N-8W : 1910' FNL, 1180' FWL									
Minerals: BLM		Surface: Lat: 36.6199267 Long:-107.6911987									
Rig : Aztec 184		BH Location: same									
OBJECTIVE: Drill 250' below the top of the Two Wells Mbr, set 4-1/2" production casing. Stimulate DK, MF, and PL intervals.											
METHOD OF DRILLING					APPROXIMATE DEPTHS OF GEOLOGICAL MARKER						
TYPE OF TOOLS		DEPTH OF DRILLING			Actual GL: 5906		Estimated KB: 5,920.0'				
Rotary		0 - TD									
LOG PROGRAM											
Type		Depth Interval									
Single Run					Marker		SUBSEA				
							TVD				
							APPROX. MD				
					Ojo Alamo		4,638'				
					Kirtland		4,539'				
					Fruitland		4,164'				
					Fruitland Coal		3,891'				
					Pictured Cliffs		3,691'				
					Lewis		3,505'				
Cased Hole					Cliff House		2,177'				
TDT- CBL		TD to 7" shoe.			Menefee		2,010'				
		Identify 4 1/2" cement top			Point Lookout		1,452'				
REMARKS:											
- Please report any flares (magnitude & duration).					Mancos						
					Greenhorn						
					Graneros (bent,mkr)						
					Two Wells						
					Paguate						
					Cubero						
					L. Cubero						
					Encinal Cyn						
					TOTAL DEPTH:						
										# Probable completion interval	
					* Possible Pay						
SPECIAL TESTS					DRILL CUTTING SAMPLES			DRILLING TIME			
TYPE					FREQUENCY		DEPTH		FREQUENCY		
Production test of the open hole interval					30'/10' intervals		2,515' to TD		Geolograph		
REMARKS:											
MUD PROGRAM:											
Interval	Type <input type="checkbox"/> Mud	#/gal	Vis, <input type="checkbox"/> sec/qt	/30 min	Other Specification						
200'	Spud	8.8 - 9.0	Sufficient to clean hole.								
2,515'	Water/LSND	8.4 - 9.0	<9		Sweep hole while whilst water drilling, LCM onsite						
6,745'	Air	1	1000 cfm for bit		Volume sufficient to maintain a stable and clean wellbore						
CASING PROGRAM:											
Casing <input type="checkbox"/> String	Depth	Size	Casing Size	Grade, Thread	Weight	Landing Point	Cement				
Surface/Conductor	200'	13 1/2"	9-5/8"	H-40 ST&C	32#		cmt to surface				
Intermediate 1	2,515'	8-3/4"	7"	J/K-55 ST&C	20#	100' below LWIS	cmt to surface				
Production	6,745'	6-1/4"	4-1/2"	J-55	11.6#	DKOT	150' inside Intermediate - TOC survey required				
CORING PROGRAM:											
None											
COMPLETION PROGRAM:											
Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead											
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**					
Cliffhouse	3,743'	500				0					
Point Lookout	4,468'	600				0					
Dakota	6,495'	2600				1171.1					
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:		
HGJ		JMP			11-Oct-04						
Form 46 7-84bw		For Drilling Dept.			For Production Dept.						

Cementing Program

Well Name: Bolack B #8N
 Location: 33-28N-8W: 1910' FNL, 1180' FWL
 County: San Juan
 State: New Mexico

Well Flac
 Formation: Blanco Mesaverde/Basin Dakota
 KB Elev (est) 5920
 GL Elev. (est) 5906

Casing Program:	Casing Strin 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	NA
Intermediate	2515	8.75	7	LT&C	Surface	NA	NA
Production	6745	6.25	4.5	ST&C	2415	NA	NA

Casing Properties:	Casing Strin 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	234	0.0405	6.456
Production	4.5	11.6	J-55	5350	4960	154	0.0155	3.875

Mud Program	Apex Interval Mud Type (ft.)	Mud Weight	Recommended Mud Properties Prio Cementing:
0 - SCP	Water/Spud	8.6-9.2	PV <20
SCP - ICP	Water/LSNE	8.6-9.2	YP <10
ICP - ICP2	Gas/Air Misi	NA	Fluid Lo. <15
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

- Do not wash pumps and lines.
- Wash pumps and lines.
- Reverse out
- Run Blend Test on Cement
- Record Rate, Pressure, and Density on 3.5" disk
- Confirm densitometer with pressurized mud scales
- 1" cement to surface if cement is not circulated.
- 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	5x 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
 1 Autofill Insert float valve
 Centralizers, 1 per joint except top joint
 1 Stop Ring
 1 Thread Lock Compound

Intermediate:	Fresh Water	20 bbl.	fresh water
Lead	195	5x Class "G" Cement	512 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+1/4 #/sk. Cellophane Flake	
		+ 5 lb/sk Gilsonite	
Tail	59	5x 50/50 Class "G"/Poz	75 cuft
Slurry 2		+ 2% gel (extender)	
500 ft fill		+1/4 #/sk. Cellophane Flake	0.1503 cuft/ft OH
		+ 2% CaCl2 (accelerator)	0.1746 cuft/ft csg ann
		+ 5 lb/sk Gilsonite	

Slurry Properties:	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)
Slurry 1	11.4	2.63	15.8
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 Stop Ring
 Centralizers one in middle of first joint, then every third collar
 1 Top Rubber Plug
 1 Thread Lock Compound

Production:	Fresh Water	10 bbl.	CW100
Lead	186	LiteCrete D961 / D124 / D154	470 cuft
Slurry 1		+ 0.03 gps D47 antifoam	
TOC, 400' above 7" shoe		+ 0.5% D112 fluid loss	
		+ 0.11% D65 TIC	
Tail	141	5x 50/50 Class "G"/Poz	203 cuft

Cementing Program

Slurry 2		+ 5% D20 gel (extender)			
1415 ft fill		+ 0.1% D46 antifoam			
		+ 1/4 #/sk. Cellophane Flake			
		+ 0.25% D167 Fluid Loss			
		+ 5 lb/sk Gilsomite			
		+ 0.1% d800, retarder			
		+ 0.15% D65, dispersant			
					0.1026 cu ft/ft OH
Slurry Properties:	Density	Yield	Water		
	(lb/gal)	(ft ³ /sk)	(gal/sk)		0.1169 cu ft/ft csg ann
Slurry 1	9.5	2.52	6.38		
Slurry 2	13	1.44	6.5	Top of Mancos	
				4830	
Casing Equipment:	4-1/2", 8R, ST&C				
	1 Float Shoe (autofill with minimal LCM in mud)				
	1 Float Collar (autofill with minimal LCM in mud)				
	1 Stop Ring				
	Centralizers, every 4th joint in mud drilled holes, none in air drilled holes.				
	1 Top Rubber Plug				
	1 Thread Lock Compound				

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

Background

The objective Dakota 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 Dakota. 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

