

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

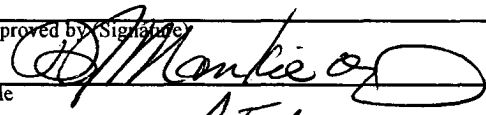
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-26633 NMNM-0-0606
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		7. If Unit or CA Agreement, Name and No.
Contact: CHERRY HLAVA E-Mail: HLAVACL@BP.COM		8. Lease Name and Well No. ATLANTIC A LS 9 M
3a. Address HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281.366.4081	9. API Well No. 30-045-32794
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface NWSW Lot 12 2355FSL 1210FWL 36.86889 N Lat, 107.87500 W Lon At proposed prod. zone NWSW Lot 12 2355FSL 1210FWL 36.86889 N Lat, 107.87500 W Lon		10. Field and Pool, or Exploratory BASIN DK & BLANCO MV
14. Distance in miles and direction from nearest town or post office* 9 MILES N/E FROM AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 27 T31N R10W Mer NMP L
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1210	16. No. of Acres in Lease 322.90	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 600	19. Proposed Depth 7526 MD 7526 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6175 GL	22. Approximate date work will start 03/01/2004	17. Spacing Unit dedicated to this well W/2
		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 12/30/2004
Title REGULATORY ANALYST		
Approved by Signature 	Name (Printed/Typed)	Date 1-14-05
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 #52439 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 30-045-32794		2 Pool Code 71599; 72319		3 Pool Name Basin Dakota; Blanco Mesaverde		
4 Property Code 000281		5 Property Name Atlantic A LS			6 Well Number # 9M	
7 OGRID No. 000778		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 6175	

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 12 (L)	27	31 N	10 W		2355	SOUTH	1210	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
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12 Dedicated Acres 322.90	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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. Cherry Hlava Signature Cherry Hlava Printed Name Regulatory Analyst Title 11-17-04 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. September 10, 2004 Date of Survey Signature and Seal of Professional Surveyor 7016 Certificate Number					

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

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.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		NEW WELL
2. Name of Operator BP AMERICA PRODUCTION COMPANY		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
3. Address of Operator P.O. BOX 3092 HOUSTON, TX 77079-2064		6. State Oil & Gas Lease No.
4. Well Location Unit Letter <u>L</u> : <u>2355</u> feet from the <u>South</u> line and <u>1210</u> feet from the <u>West</u> line Section <u>27</u> Township <u>31N</u> Range <u>10W</u> NMPM <u>SAN JUAN</u> County		7. Lease Name or Unit Agreement Name Atlantic A LS (APD filed with BLM NMNM 077112)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>6118'</u>		8. Well Number <u>9 M</u>
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>		9. OGRID Number 000778
Pit type <u>DRILLING</u> Depth to Groundwater <u>>100'</u> Distance from nearest fresh water well <u>>1000'</u> Distance from nearest surface water <u>>1000'</u>		10. Pool name or Wildcat Basin Dakota & Blanco Mesaverde
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume _____ bbls; Construction Material <u>IMPERVIOUS</u>		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: LINED DRILLING PIT <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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 ☐.

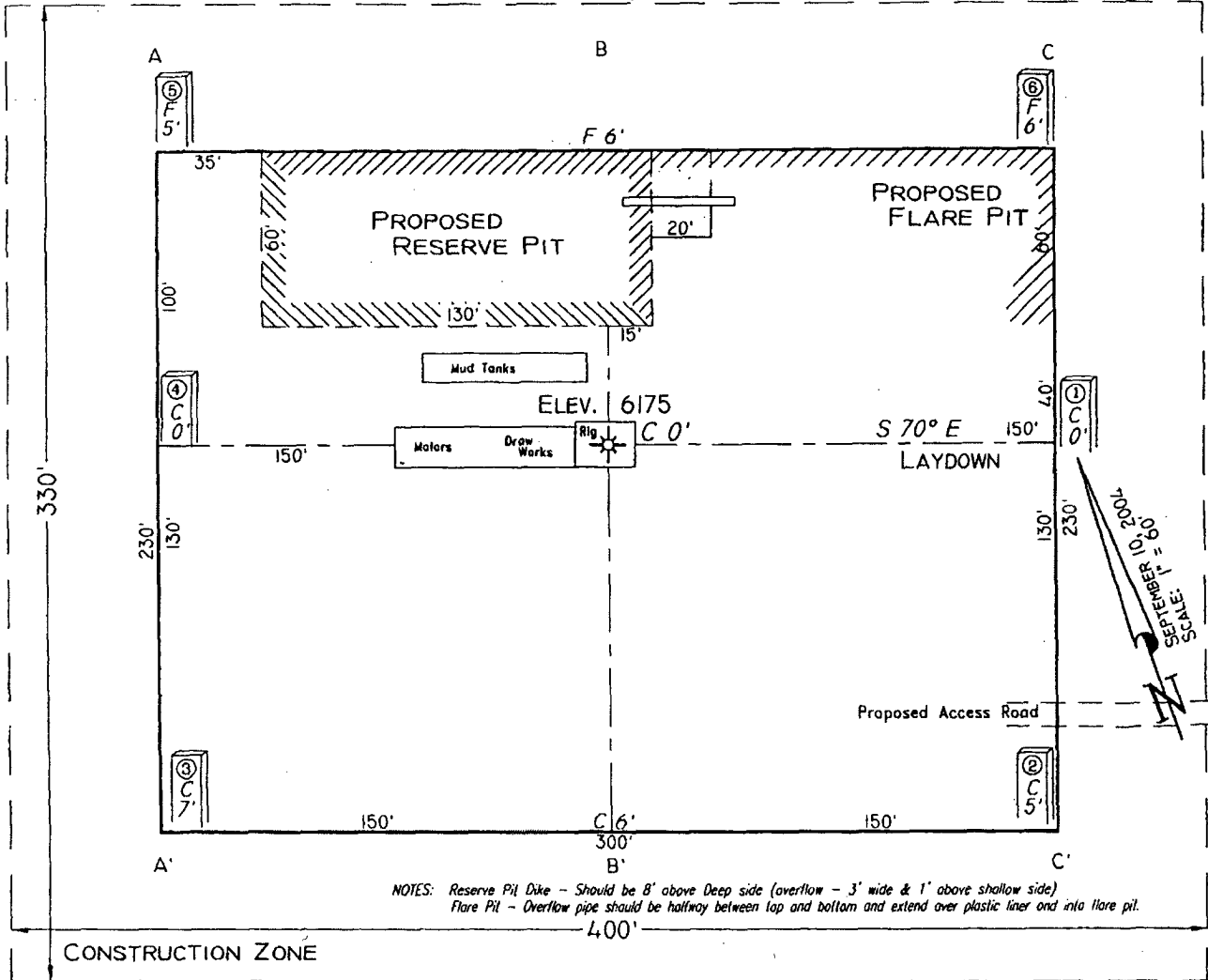
SIGNATURE _____ TITLE Regulatory Analyst DATE 12/31/2004

Type or print name Cherry Hlava E-mail address: hlavac1@bp.com Telephone No. 281-366-4081
For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
Conditions of Approval (if any):

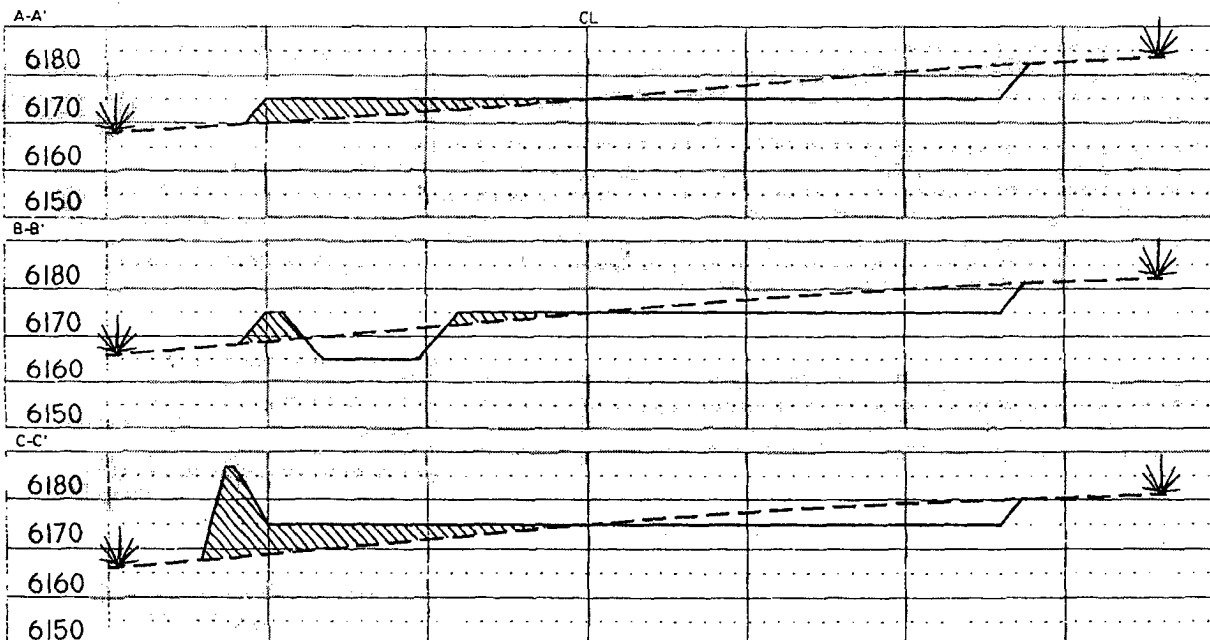
PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 Atlantic A LS #9M
 2355' F/SL 1210' F/WL
 SEC. 27, T31N, R10W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°52'08"
 Long: 107°52'30"



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

10/8/2004

Lease:	Atlantic A LS	Well Name & No.	Atlantic A LS #9M	Field:	Blanco Mesaverde/Basin Dakota
County:	San Juan, New Mexico	Surface Location:	27-31N-10W : 2355' FSL, 1210' FWL		
Minerals:	BLM	Surface:	Lat: 36.8686807 Long:-107.8746060		
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:	6175	Estimated KB: 6,189.0'				
Rotary	0 - TD	Marker		SUBSEA	TVD	APPROX. MD		
LOG PROGRAM		Ojo Alamo		4,591'	1,598'	1,598'		
Type	Depth Interval	Kirtland		4,517'	1,672'	1,672'		
Single Run		Fruitland	*	3,852'	2,337'	2,337'		
		Fruitland Coal	*	3,593'	2,596'	2,596'		
		Pictured Cliffs	*	3,274'	2,915'	2,915'		
		Lewis	*	3,085'	3,104'	3,104'		
Cased Hole		Cliff House	#	1,767'	4,422'	4,422'		
TDT- CBL	TD to 7" shoe	Menefee	#	1,440'	4,749'	4,749'		
	Identify 4 ½" cement top	Point Lookout	#	1,015'	5,174'	5,174'		
REMARKS:		Mancos		648'	5,541'	5,541'		
- Please report any flares (magnitude & duration).		Greenhorn		-987'	7,176'	7,176'		
		Graneros (bent,mkr)		-1,035'	7,224'	7,224'		
		Two Wells	#	-1,087'	7,276'	7,276'		
		Paguate	#	-1,181'	7,370'	7,370'		
		Cubero	#	-1,213'	7,402'	7,402'		
		L. Cubero	#	-1,236'	7,425'	7,425'		
		Encinal Cyn	#	-1,273'	7,462'	7,462'		
		TOTAL DEPTH:		-1,337'	7,526'	7,526'		
				# Probable completion interval			* Possible Pay	
		SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME		
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH			
None		30'/10' intervals	3,204' to TD	Geolograph	0 - TD			
REMARKS:								

SPECIAL TESTS	DRILL CUTTING SAMPLES	DRILLING TIME
TYPE	FREQUENCY	DEPTH
None	30'/10' intervals	3,204' to TD
		Geolograph
		0 - TD

REMARKS:	
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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.		
3,204'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
7,526'	Air	1	1000 cfm for hammer		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	3,204'	8-3/4"	7"	J/K-55 ST&C	20#	100' below LWIS	cmt to surface
Production	7,526'	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/NMOC 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	4,422'	500	0
Point Lookout	5,174'	600	0
Dakota	7,276'	2600	999.28

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:
HGJ	JMP	8-Oct-04	
Form 46 7-84bw	For Drilling Dept.		For Production Dept.

Cementing Program

Well Name: Atlantic A LS #9M
 Location: 27-31N-10W : 2355' FSL, 1210' FWL
 County: San Juan
 State: New Mexico

Well Flac
 Formation: Blanco Mesaverde/Basin Dakota
 KB Elev (est) 6189
 GL Elev. (est) 6175

Casing Program:	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread TOC (ft.)	Stage To Cmt Clr. Out Or TOL (f (bbl.))
Surface	200	13.5	9.625	ST&C Surface	NA
Intermediate	3204	8.75	7	LT&C Surface	NA
Production -	7526	6.25	4.5	ST&C 3104	NA

Casing Properties:	Size (in.)	Weight (lb/ft)	Grade	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs. (bbl./ft.))	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	Mud Type	Mud Weight	Recommended Mud Properties Prio Cementing:
Apx. Interval (ft.)			PV <20 YP <10 Fluid Lr <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 (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

Intermediate:	Fresh Water	20 bbl	fresh water
Lead		264 sx Class "G" Cement	694 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+1/4 #/sk. Cellophane Flake	
		+ 5 lb/sk Gilsonite	
Tail		59 sx 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 (ft3/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

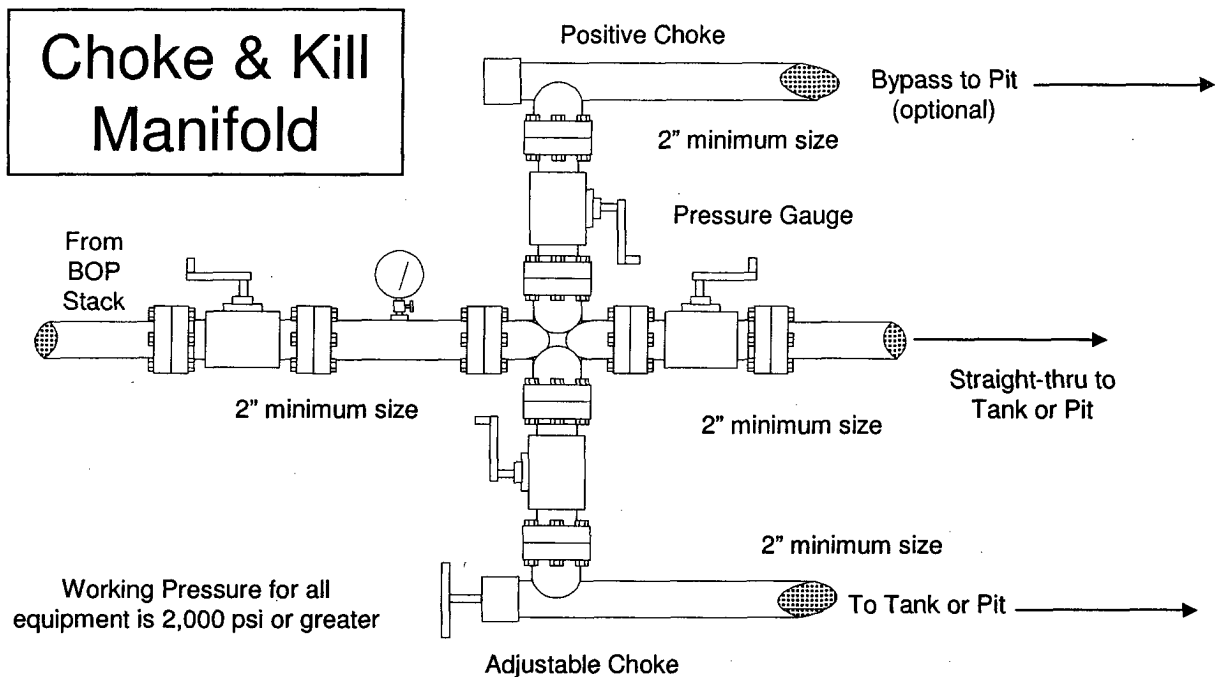
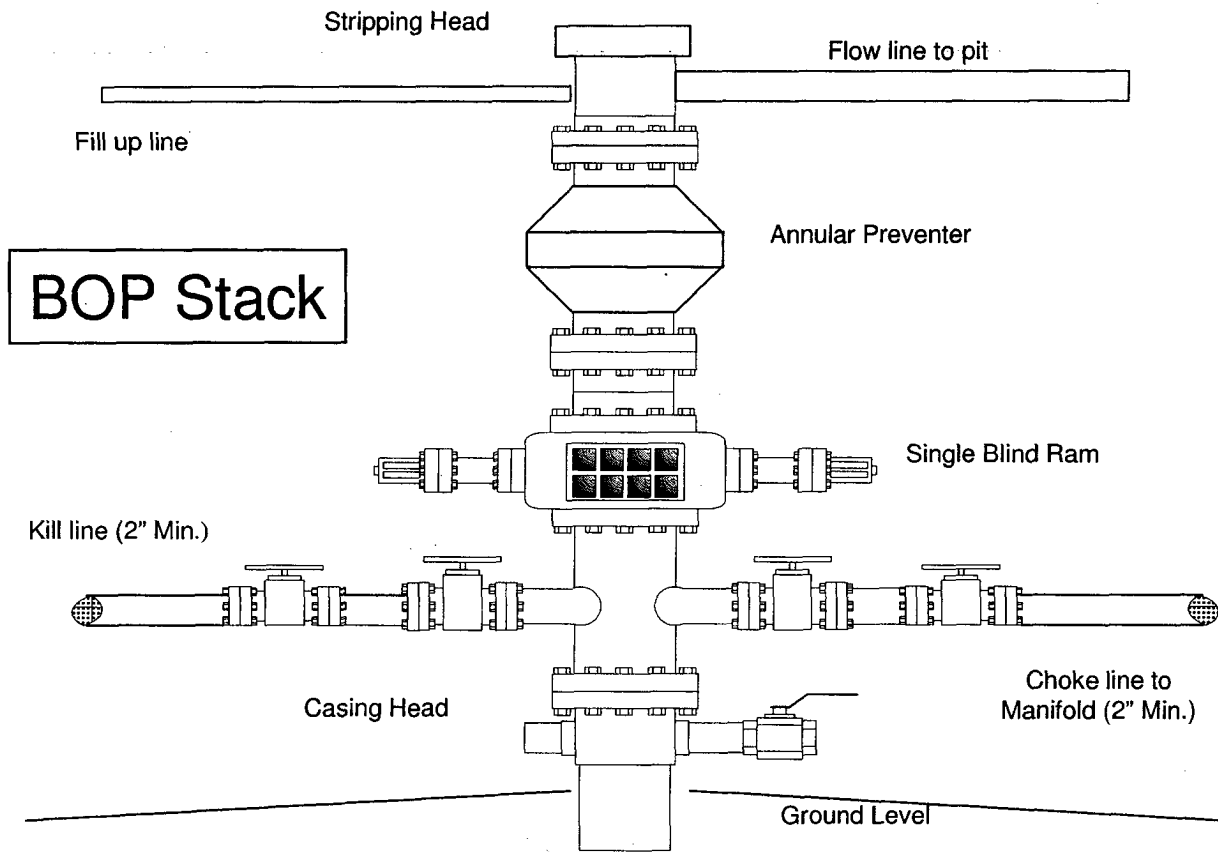
Cementing Program

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			188 LiteCrete D961 / D124 / D154	473 cuft
Slurry 1			+ 0.03 gps D47 antifoam	
TOC, 400' above 7" shoe			+ 0.5% D112 fluid loss	
			+ 0.11% D65 TIC	
Tail			148 sx 50/50 Class "G"/Poz	213 cuft
Slurry 2			+ 5% D20 gel (extender)	
1485 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 cuft/ft OH
Slurry Properties:	Density	Yield	Water	
	(lb/gal)	(ft ³ /sk)	(gal/sk)	
Slurry 1	9.5	2.52	6.38	0.1169 cuft/ft csg ann
Slurry 2	13	1.44	6.5	Top of Mancos
				5541
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			

BP American Production Company

Well Control Equipment Schematic



**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 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 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.
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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.