

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION OF FOR PERMIT TO DRILL OR REENTER

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

DIST. 3

5.9 Lease Serial No. **SF- 078202**

6. If Indian, Allottee or tribe Name

7. If Unit or CA Agreement, Name and No

8. Lease Name and Well No.

Schoen LS 2N

9. API Well No.

30-045-34041

10. Field and Pool, or Exploratory

Basin Dakota & Blanco Mesaverde

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

SECTION 27 T30N & R10W

N

12. County or Parish

SAN JUAN

13. State

NEW MEXICO

17. Spacing Unit dedicated to this well

317.28 w/2

20. BLM/BIA Bond No. on file

WY2924

23. Estimated duration

7 DAYS

21. Elevations (show whether DF, KDB., RT, GL, etc.)

6067' GL

22. Approximate date work will start*

04/19/07

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

Name (Printed/typed)

Date

Kristina Hurts

10/25/06

Title

Regulatory Analyst

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

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.

*(Instructions on reverse)

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

API Number 30-045-34041	Pool Code 71599 & 72319	Pool Name Basin Dakota & Blanco	Well Number # 2N
Property Code 001028	Property Name Schoen LS	Operator Name BP AMERICA PRODUCTION COMPANY	Elevation 6067
OGRID No. 778			

Surface Location

UL or Lot No. Lot 14 (N)	Section 27	Township 30 N	Range 10 W	Lot Idn	Feet from the 705	North/South line SOUTH	Feet from the 1820	East/West line WEST	County SAN JUAN
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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 317.28	Joint or Infill	Consolidation Code	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

16				5248(R)				17 OPERATOR CERTIFICATION	
Lot 4				Lot 3				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Lot 5				Lot 6				Signature Kristina Hurts	
Lot 12				Lot 11				Printed Name KRISTINA HURTS	
Lot 13				Lot 14				Title Regulatory Analyst	
1820'				705'				Date 10-25-06	
2607(R)				2624(R)				18 SURVEYOR CERTIFICATION	
Lot 15				Lot 16				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.	
2607(R)				2624(R)				Date of Survey June 29, 2006	
2607(R)				2624(R)				Signature and Seal of Professional Surveyor	
2607(R)				2624(R)				GARY D. VANN NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 7016	

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. <u>30-045-34041</u> 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 SCHOEN LS
8. Well Number 2N
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 N : 705 feet from the SOUTH line and 1820 feet from the West line
Section 27 Township 30N Range 10W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6067'

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 >200' <1000'

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

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 ☐

OTHER: **LINED DRILLING PIT** ☒

SUBSEQUENT REPORT OF:

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

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 11/17/2004. 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 NMOC guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kristina Hurts TITLE Regulatory Analyst DATE 10/25/06

Type or print name Kristina Hurts E-mail address: hurtk0@bp.com Telephone No. 281-366-3866
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 4 DATE JAN 08 2007
Conditions of Approval (if any):

Schoen LS # 2N
705' F/SL 1820' F/WL
SEC. 27, T30N, R10W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

Site plan showing the layout of the proposed flare pit and reserve pit, including dimensions, equipment locations, and road rerouting.

Dimensions and Distances:

- Overall width: 400'
- Overall height: 330'
- Distance from top edge to Reserve Pit: 35'
- Distance from top edge to Flare Pit: 6'
- Distance from Reserve Pit to Flare Pit: 130'
- Distance from Reserve Pit to Mud Tanks: 150'
- Distance from Mud Tanks to Rig: 150'
- Distance from Rig to Laydown: 150'
- Distance from Laydown to Flare Pit: 150'
- Distance from Reserve Pit to Rig: 270'
- Distance from Rig to Flare Pit: 150'
- Distance from Reserve Pit to Mud Tanks: 150'
- Distance from Mud Tanks to Rig: 150'
- Distance from Rig to Laydown: 150'
- Distance from Laydown to Flare Pit: 150'
- Distance from Reserve Pit to Flare Pit: 130'
- Distance from Reserve Pit to Mud Tanks: 150'
- Distance from Mud Tanks to Rig: 150'
- Distance from Rig to Laydown: 150'
- Distance from Laydown to Flare Pit: 150'
- Distance from Reserve Pit to Flare Pit: 130'
- Distance from Reserve Pit to Mud Tanks: 150'
- Distance from Mud Tanks to Rig: 150'
- Distance from Rig to Laydown: 150'
- Distance from Laydown to Flare Pit: 150'

Equipment and Features:

- PROPOSED RESERVE PIT
- PROPOSED FLARE PIT
- Mud Tanks
- Motors
- Draw Works
- Rig
- LAYDOWN
- Existing Field Road
- Proposed Road Reroute

Notes:

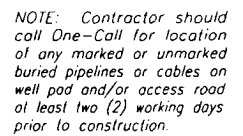
- Reserve Pit Dike - Should be 8' above Deep side (overflow - 3' wide & 1' above shallow side)
- Flare Pit - Overflow pipe should be halfway between top and bottom and extend over plastic liner and into flare pit

Scale: 1" = 60'

Date: JUNE 29, 2006

Construction Zone: Indicated at the bottom left.

SCALE: 1"=60'-HORIZ.
1"=40'-VERT.



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

10/23/2006

Lease:	Schoen LS	Well Name & No.	Schoen LS #2N	Field:	Blanco Mesaverde/Basin Dakota
County:	San Juan, New Mexico	Surface Location:	27-30N-10W: 705' FSL, 1820' FWL		
Minerals:	Federal	Surface:	Lat: 36.7804500 deg; Long: -107.8762500 deg		
Rig :	H & P 292	BH Location:	same		

OBJECTIVE: Drill 260' 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:	6067	Estimated KB: 6,081.0'	
Rotary	0 - TD	Marker		SUBSEA	TVD
LOG PROGRAM					APPROX. MD
Type	Depth Interval	Ojo Alamo		4,787'	1,294'
Single Run		Kirtland		4,630'	1,451'
		Fruitland	*	4,067'	2,014'
		Fruitland Coal	*	3,783'	2,298'
		Pictured Cliffs	*	3,483'	2,598'
		Lewis	*	3,346'	2,735'
Cased Hole	TD to 1200'	Cliff House	#	1,965'	4,116'
RST- CBL		Menefee	#	1,725'	4,356'
		Point Lookout	#	1,205'	4,876'
		Mancos		871'	5,210'
		Greenhorn		-762'	6,843'
	Identify 4 1/2" cement top	Graneros (bent,mkr)		-818'	6,899'
		Two Wells	#	-874'	6,955'
		Paguate	#	-955'	7,036'
		Cubero	#	-1,012'	7,093'
		L. Cubero	#	-1,053'	7,134'
		Encinal Cyn	#	-1,095'	7,176'
		TOTAL DEPTH:		-1,134'	7,215'

REMARKS:

The recommended TD is intended to penetrate the ENCN (~40') in order to evaluate, and possibly produce it. Offsetting wells encountered no water flow at this depth. See attached cross-section.

The intermediate casing should be set 100 ft. into the MENF to minimize the risks encountered drilling through the possibly water productive CLFH.

Please note the log interval extends from TD to 1200' (above the Ojo Alamo).

SPECIAL TESTS

TYPE	FREQUENCY	DEPTH	FREQUENCY	DEPTH
None	30'/10' intervals	4,456' to TD	Geolograph	0 - TD

REMARKS:

MUD PROGRAM:

Interval	TypeMud	#/gal	Vis, sec/qt	/30 min	Other Specification
200'	Spud	8.8 - 9.0	Sufficient to clean hole.		
4,456'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
7,215'	Air	1	1000 cfm for hammer		Volume sufficient to maintain a stable and clean wellbore

CASING PROGRAM:

CasingString	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	0' - 4000'	8-3/4"	7"	J/K-55 ST&C	20#		
Intermediate	4000' -4456'	8 3/4"	7"	N-80 ST&C	23#	100' below MENF	cmt to surface
Production	7,215'	6-1/4"	4-1/2"	P-110 5/8	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	4,116'	500	0
Point Lookout	4,876'	600	0
Dakota	6,955'	2600	1069.9

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:	DATE:	APPROVED:	DATE:
HGJ	JMP	23-Oct-06		
Form 46 7-84bw	For Drilling Dept.		For Production Dept.	

Cementing Program

Well Name: Schoen LS #2N
 Location: 27-30N-10W: 705' FSL, 1820' FWL
 County: San Juan
 State: New Mexico

Well Flac
 Formation: Blanco Mesaverde/Basin Dakota
 KB Elev (est) 6081
 GL Elev. (est) 6067

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)
Surface	200	13.5	9.625	ST&C	Surface
Intermediate	4456	8.75	7	ST&C	Surface
Production -	7215	6.25	4.5	ST&C	4306

Casing Properties:

(No Safety Factor Included)					
Casing String	Size (in.)	Weight (lb/ft)	Grade	Burst (psi.)	Collapse (psi.)
Surface	9.625	32	H-40	2270	1400
Intermediate	7	20	K-55	3740	2270
Intermediate	7	23	N80	6340	3830
Production -	4.5	11.6	J-55	5350	4960

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	<u>Recommended Mud Properties Prio Cementing:</u>	
			PV	<20
			YP	<10
			Fluid Lost	<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.	FreshWater	
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, as needed
- 1 Stop Ring
- 1 Thread Lock Compound

Cementing Program

Intermediate:

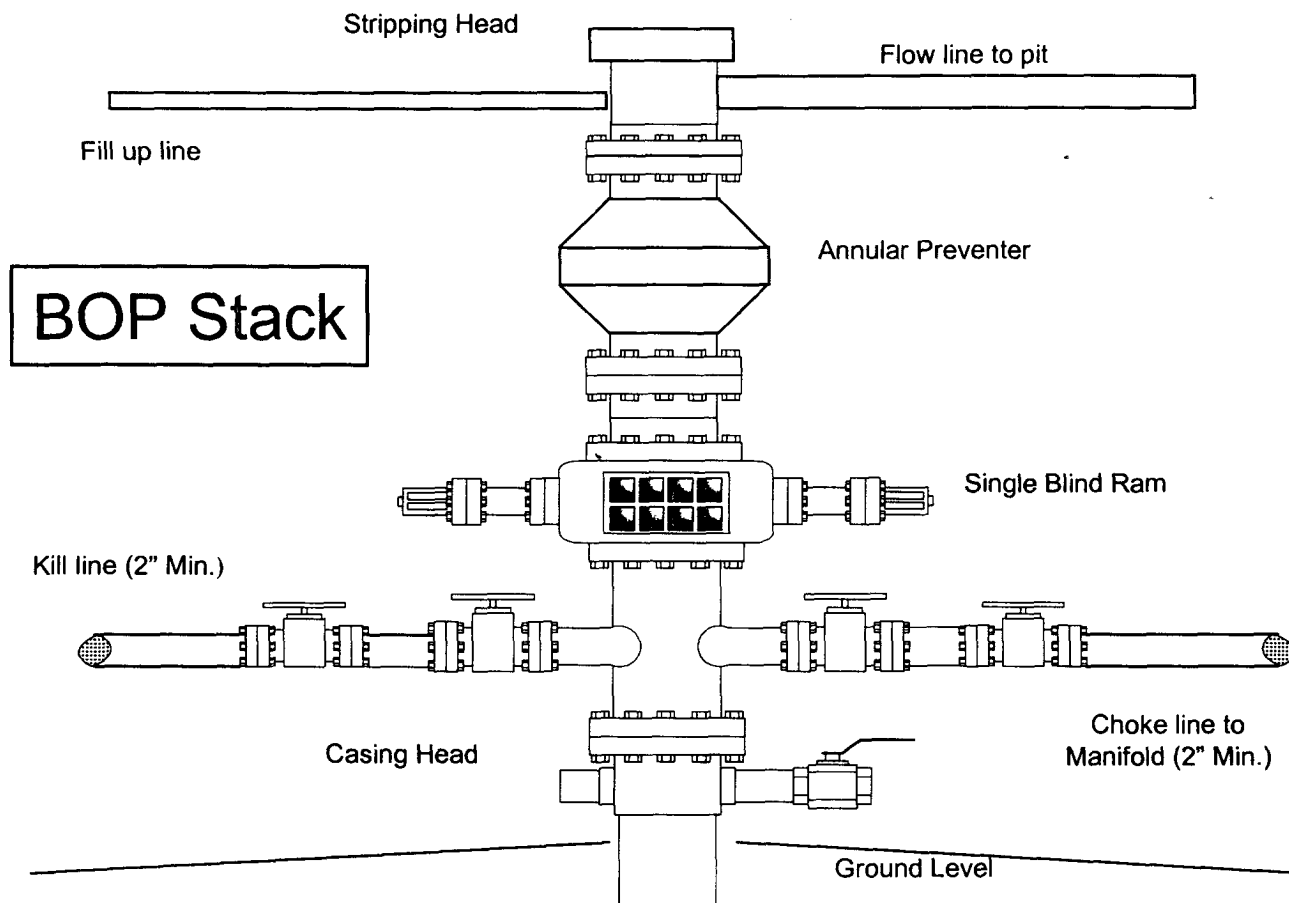
Fresh Water	20 bbl	fresh water		
Lead		389 sx Class "G" Cement		1023 cuft
Slurry 1		+ 3% D79 extender		
TOC@Surface		+1/4 #/sk. Cellophane Flake		
		+ 5 lb/sk Gilsonite		
Tail		59 sx 50/50 Class "G"/Poz		75 cuft
Slurry 2		+ 2% gel (extender)		
500 ft fill		+1/4 #/sk. Cellophane Flake		0.1503 cuft/ft OH
		+ 2% CaCl2 (accelerator)		0.1746 cuft/ft csg ann
		+ 5 lb/sk Gilsonite		
Slurry Properties:	Density	Yield	Water	
	(lb/gal)	(ft ³ /sk)	(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 as needed			
	1 Top Rubber Plug			
	1 Thread Lock Compound			

Production:

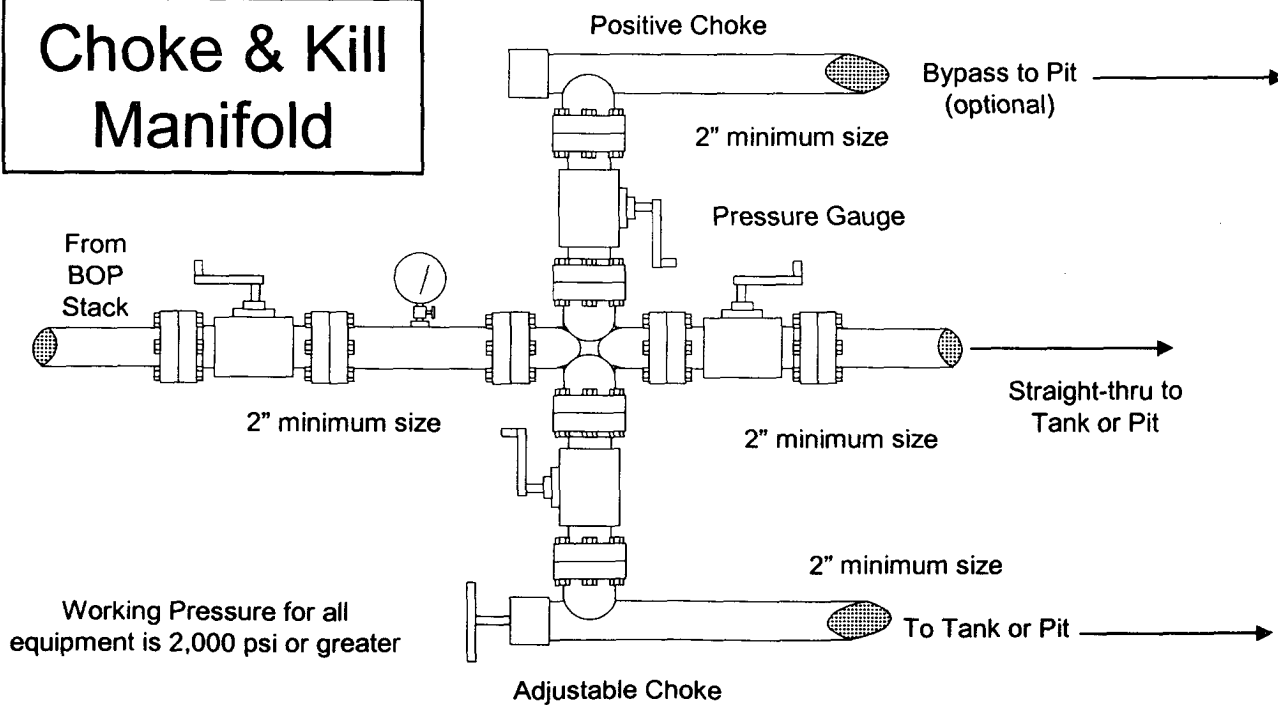
Fresh Water	10 bbl	CW100		
Lead		97 LiteCrete D961 / D124 / D154		246 cuft
Slurry 1		+ 0.03 gps D47 antifoam		
TOC, 400' above 7" shoe		+ 0.5% D112 fluid loss		
		+ 0.11% D65 TIC		
Tail		150 sx 50/50 Class "G"/Poz		216 cuft
Slurry 2		+ 5% D20 gel (extender)		
1505 ft fill		+ 0.1% D46 antifoam		
		+ 1/4 #/sk. Cellophane Flake		
		+ 0.25% D167 Fluid Loss		
		+ 5 lb/sk Gilsonite		
		+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	
Slurry 2	13	1.44	6.5	
				Top of Mancos
				5210
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, as needed			
	1 Top Rubber Plug			
	1 Thread Lock Compound			

BP American Production Company

Well Control Equipment Schematic



Choke & Kill Manifold



Additional Operator Remarks
Schoen LS 2N
APD

NOTICE OF STAKING WAS SUBMITTED ON 08/07/06

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 7215' MD. Complete in the Basin Dakota Pool, isolate the Dakota; complete into the Blanco Mesaverde, establish a production rate; drill out the bridge plug and commingle production downhole.

Application for Downhole Commingling authority (NMOCD order R-11363) will be submitted to all appropriate for approval after Permit to Drill has been approved.

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 +/- 2000 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