

RCVD JAN 5 '07

OIL CONS. DIV.

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>SF- 078202</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well Gas <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or tribe Name
2. Name of Operator <b>BP AMERICA PRODUCTION COMPANY</b>		7. If Unit or CA Agreement, Name and No
3a. Address <b>P.O. BOX 3092 HOUSTON, TX 77079-2064</b>	3b. Phone No. (include area code) <b>281-366-3866</b>	8. Lease Name and Well No. <b>Schoen LS 2E</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>1095' ENL &amp; 880' FWL NWNW</b> At proposed prod. Zone <b>SAME</b>		9. API Well No. <b>30-045-34050</b>
14. Distance in miles and direction from nearest town or post office* <b>8.1 MILES SOUTHEAST FROM AZTEC, NM</b>		10. Field and Pool, or Exploratory <b>Basin Dakota &amp; Blanco Mesaverde</b>
15. Distance from proposed* Location to nearest Property or lease line, ft. (Also to nearest drig. Ujnit line, if any) <b>880'</b>	16. No. of Acres in lease <b>317.28</b>	11. Sec., T., R., M., or Blk, and survey or Area <b>SECTION 27 T30N &amp; R10W</b>
17. Spacing Unit dedicated to this well <b>W/S</b>	12. County or Parish <b>SAN JUAN</b>	13. State <b>NEW MEXICO</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth <b>7362' MD</b>	20. BLM/BIA Bond No. on file <b>WY2924</b>
21. Elevations (show whether DF, KDB., RT, GL, etc.) <b>6203' GL</b>	22. Approximate date work will start* <b>05/01/07</b>	23. Estimated duration <b>7 DAYS</b>

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 <i>Kristina Hurts</i>	Name (Printed/typed) <b>Kristina Hurts</b>	Date <b>10/31/06</b>
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Title

Regulatory Analyst

Approved by (Signature) <i>Acting ADM Minerals</i>	Name (Printed/Typed)	Date <b>11/3/07</b>
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Title <i>Jim Loral</i>	Office
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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)

3/3



NMOCD B 1/8/07

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

2003 NOV 2006 AUG 2 8 3 36

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number <b>30-045-34050</b>	2 Pool Code <b>71599; 72319</b>	3 Pool Name <b>Basin Dakota &amp; Blanco Mesaverde</b>
4 Property Code <b>00102B</b>	5 Property Name <b>Schoen LS</b>	6 Well Number <b># 2E</b>
7 OGRID No. <b>778</b>	8 Operator Name <b>BP AMERICA PRODUCTION COMPANY</b>	9 Elevation <b>6203</b>

10 Surface Location

UL or Lot No. <b>Lot 4 (D)</b>	Section <b>27</b>	Township <b>30 N</b>	Range <b>10 W</b>	Lot Idn	Feet from the <b>1095</b>	North/South line <b>NORTH</b>	Feet from the <b>880</b>	East/West line <b>WEST</b>	County <b>SAN JUAN</b>
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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 <b>317.28</b>	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

16				17 OPERATOR CERTIFICATION			
Lot 4				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.			
1095'				Signature <b>Kristina Hurts</b>			
880'				Printed Name <b>KRISTINA HURTS</b>			
Lot 5				Title <b>Regulatory Analyst</b>			
Lot 6				Date <b>10-31-06</b>			
Lot 7				18 SURVEYOR CERTIFICATION			
Lot 8				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.			
Lot 9				Date of Survey <b>June 28, 2006</b>			
Lot 10				Signature and Seal of Professional Surveyor			
Lot 11				7016			
Lot 12				7016			
Lot 13				7016			
Lot 14				7016			
Lot 15				7016			
Lot 16				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

Form C-103  
May 27, 2004

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

WELL API NO. <b>30-045-34050</b> <del>XXXXXXXX</del>
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 <b>SCHOEN LS</b>
8. Well Number <b>2E</b>
9. OGRID Number <b>000778</b>
10. Pool name or Wildcat <b>Basin Dakota &amp; Blanco Mesaverde</b>

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 **D** : **1095** feet from the **NORTH** line and **880** feet from the **West** line  
Section **27** Township **30N** Range **10W** NMPM **SAN JUAN** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**6203'**

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 ☐

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 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 NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

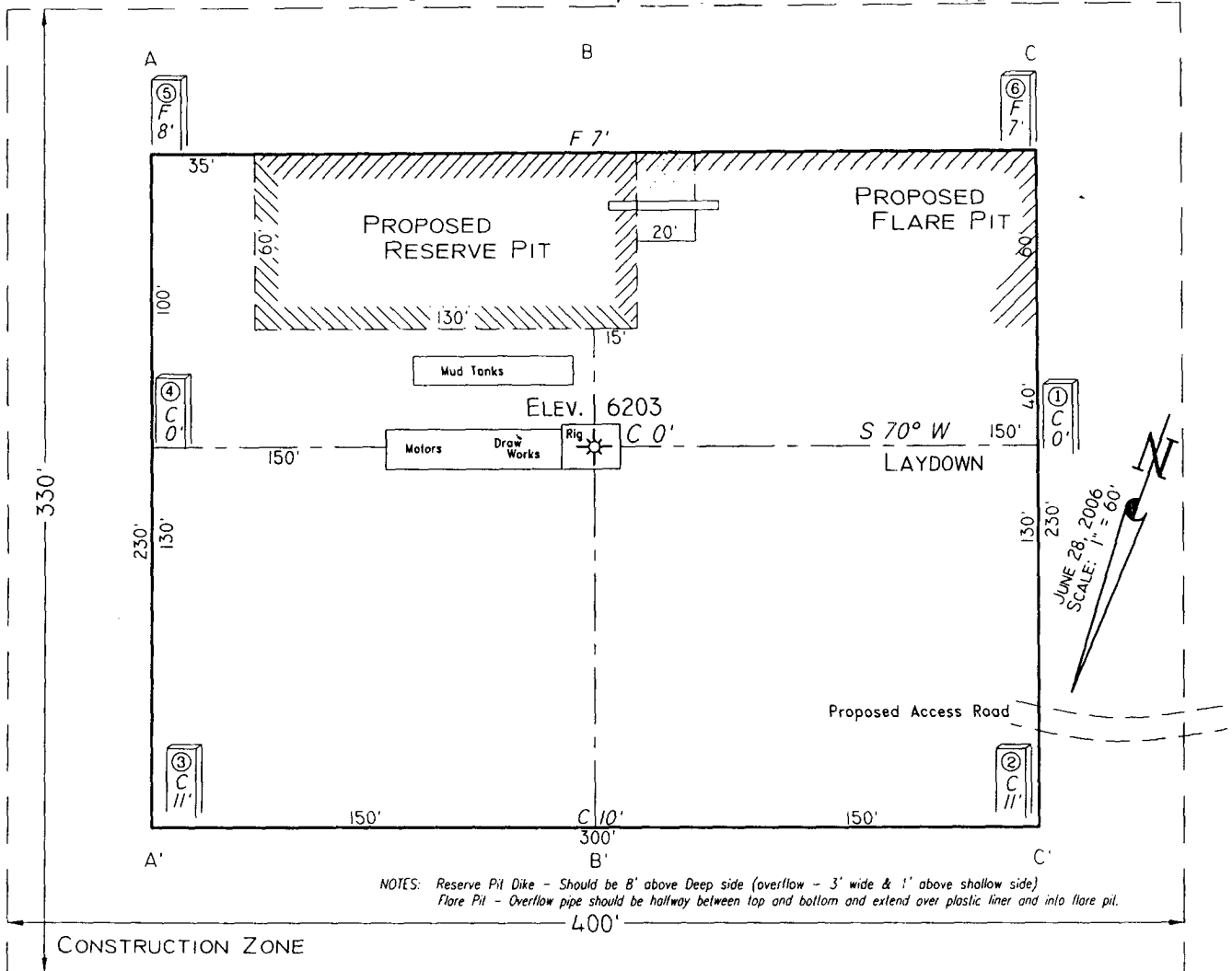
SIGNATURE Kristina Hurts TITLE Regulatory Analyst DATE 10/31/06

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):

**PAD LAYOUT PLAN & PROFILE**  
**BP AMERICA PRODUCTION COMPANY**  
 Schoen LS # 2E  
 1095' F/NL 880' F/WL  
 SEC. 27, T30N, R10W, N.M.P.M.  
 SAN JUAN COUNTY, NEW MEXICO

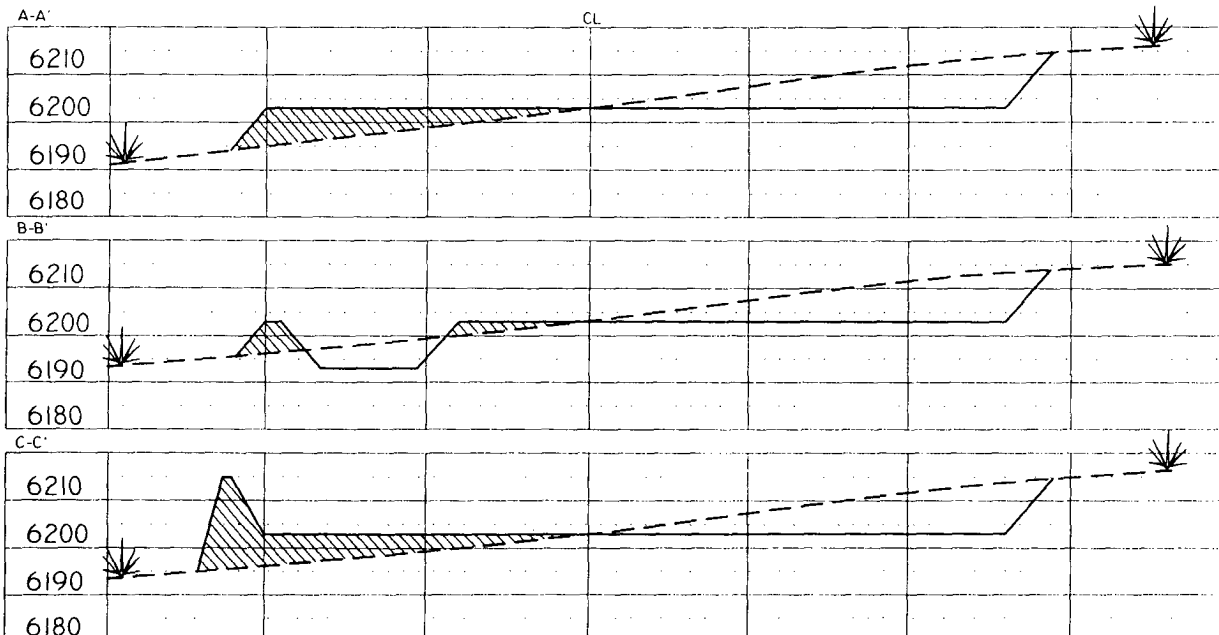
Lat: 36.78743°  
 Long: 107.87773° (83)



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

10/23/2006

<b>Lease:</b>	Schoen LS	<b>Well Name &amp; No.</b>	Schoen LS #2E	<b>Field:</b>	Blanco Mesaverde/Basin Dakota
<b>County:</b>	San Juan, New Mexico	<b>Surface Location:</b>	27-30N-10W: 1095' FNL, 880' FWL		
<b>Minerals:</b>	Federal	<b>Surface:</b>	Lat: 36.7873722 deg; Long: -107.8772628 deg		
<b>Rig :</b>	H & P 292	<b>BH Location:</b>	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:	6203	Estimated KB: 6,217.0'			
Rotary	0 - TD	Marker		SUBSEA	TVD	APPROX. MD	
LOG PROGRAM		Ojo Alamo		4,762'	1,455'	1,455'	
Type	Depth Interval	Kirtland		4,627'	1,590'	1,590'	
Single Run		Fruitland	*	3,939'	2,278'	2,278'	
		Fruitland Coal	*	3,722'	2,495'	2,495'	
		Pictured Cliffs	*	3,451'	2,766'	2,766'	
		Lewis	*	3,296'	2,921'	2,921'	
Cased Hole		Cliff House	#	1,966'	4,251'	4,251'	
RST- CBL	TD to 1400'	Menefee	#	1,681'	4,536'	4,536'	
	Identify 4 ½" cement top	Point Lookout	#	1,172'	5,045'	5,045'	
REMARKS:		Mancos		824'	5,393'	5,393'	
The recommended TD is intended to penetrate the ENCN (~50') in order to evaluate, and possibly produce it. Offsetting wells encountered no water flow at this depth. See attached cross-section.		Greenhorn		-790'	7,007'	7,007'	
		Graneros (bent,mkr)		-843'	7,060'	7,060'	
The intermediate casing should be set 100 ft. into the MENF to minimize the risks encountered drilling through the possibly water productive CLFH.		Two Wells	#	-895'	7,112'	7,112'	
		Paguate	#	-978'	7,195'	7,195'	
Please note the log interval extends from TD to 1400' (above the Ojo Alamo).		Cubero	#	-1,035'	7,252'	7,252'	
		L. Cubero	#	-1,072'	7,289'	7,289'	
		Encinal Cyn	#	-1,101'	7,318'	7,318'	
		TOTAL DEPTH:		-1,145'	7,362'	7,362'	
		# Probable completion interval				# Possible Pay	

SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH
None		30'/10' intervals	4,636' to TD	Geologist	0 - TD
<b>REMARKS:</b>					

MUD PROGRAM:					
Interval	TypeMud	#/gal	Vis, sec/qt	/30 min	Other Specification
200'	Spud	8.8 - 9.0	Sufficient to clean hole.		
4,636'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
7,362'	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' -4636'	8 3/4"	7"	N-80 ST&C	23#	100' below MENF	cmt to surface
Production	7,362'	6-1/4"	4-1/2"	P-110	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	4,251'	500	0
Point Lookout	5,045'	600	0
Dakota	7,112'	2600	1035.36

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 #2E		
Location:	27-30N-10W: 1095' FNL, 880' FWL		
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Blanco Mesaverde/Basin Dakota
		KB Elev (est)	6217
		GL Elev. (est)	6203

## 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	4636	8.75	7	ST&C	Surface
Production -	7362	6.25	4.5	ST&C	4486

## Casing Properties:

Casing String	Size (in.)	(No Safety Factor Included)		Burst (psi.)	Collapse (psi.)
		Weight (lb/ft)	Grade		
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	Recommended Mud Properties Prio Cementing:
			PV <20
			YP <10
			Fluid Loss <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 (ft <sup>3</sup> /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		407 sx Class "G" Cement	1070 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		

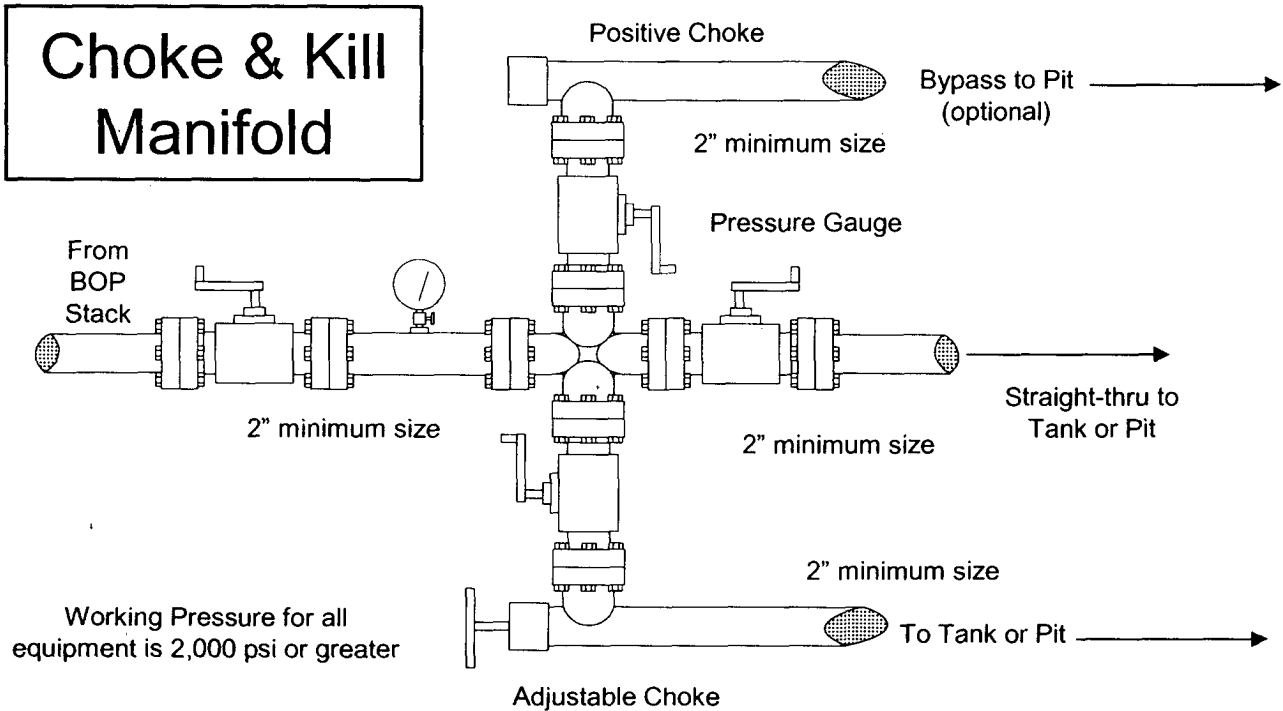
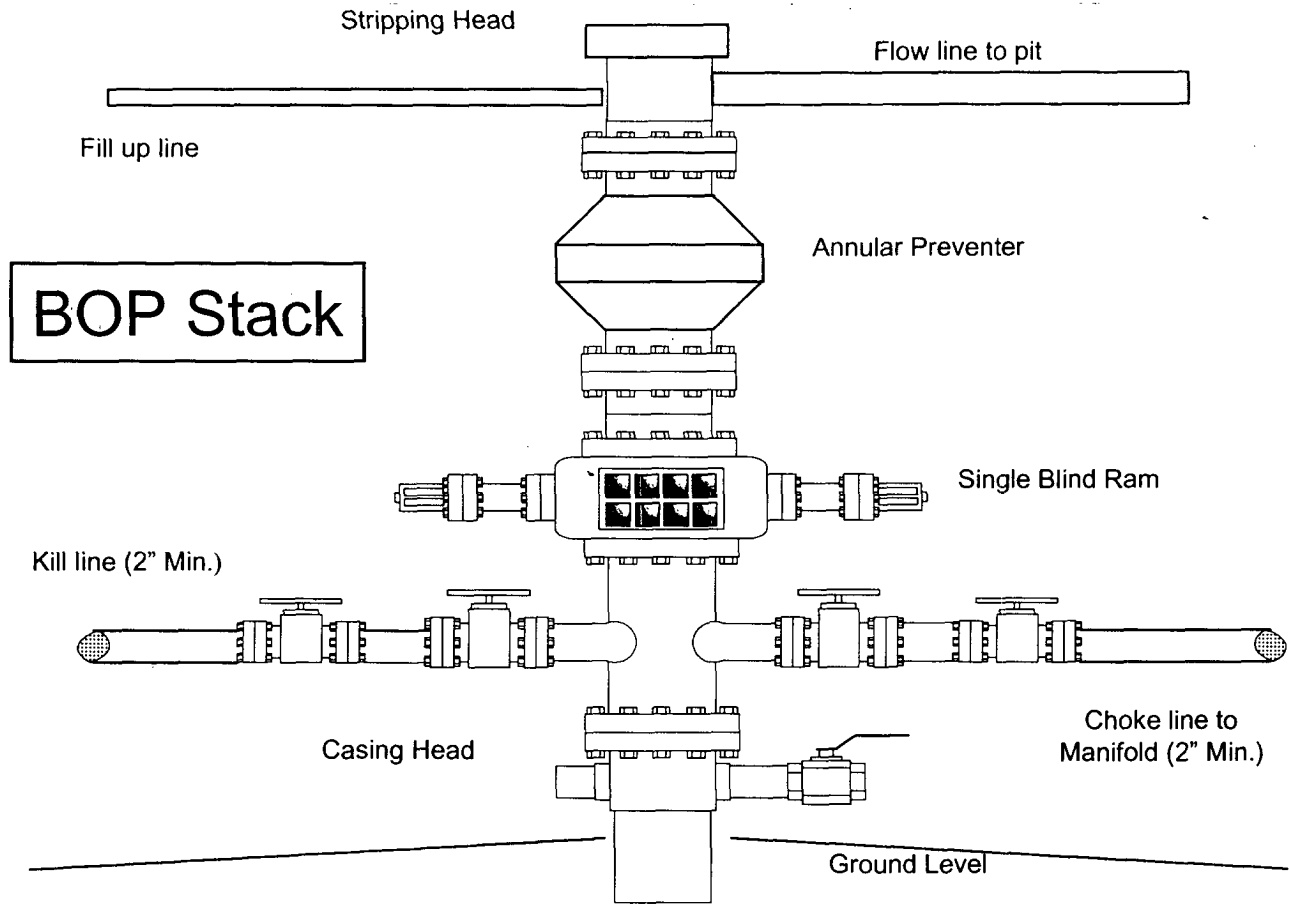
1 Float Shoe (autofill with minimal LCM in mud)  
 1 Float Collar (autofill with minimal LCM in mud)  
 1 Stop Ring  
 Centralizers as needed  
 1 Top Rubber Plug  
 1 Thread Lock Compound

## Production:

Fresh Water	10 bbl	CW100	
Lead		98 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		147 sx 50/50 Class "G"/Poz	211 cuft
Slurry 2		+ 5% D20 gel (extender)	
1469 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 (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	9.5	2.52	6.38
Slurry 2	13	1.44	6.5
			Top of Mancos 5393
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





**Additional Operator Remarks**  
**Schoen LS 2E**  
**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 7362' 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**