

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 031335
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. STATE GAS COM AB 3
3a. Address P.O. BOX 3092 HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281.366.4081 Fx: 281.366.0700	9. API Well No. 30-045-32417
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESE 680FSL 795FEL 36.44900 N Lat, 107.50900 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BASIN DAKOTA & BLANCO MV
14. Distance in miles and direction from nearest town or post office* 11.5 MILES NORTH/EAST FROM BLOOMFIELD, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 2 T29N R10W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 680	16. No. of Acres in Lease	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 6963 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5873 GL	22. Approximate date work will start 08/15/2004	17. Spacing Unit dedicated to this well 317.70 5/2
		20. BLM/BIA Bond No. on file WY2924
		23. Estimated duration 7 DAYS

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 (Electronic Submission)	Name (Printed/Typed) CHERRY HLAVA	Date 06/08/2004
Title REGULATORY ANALYST		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 9-3-04
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 #31642 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
EXCEPT WHERE SHOWN OTHERWISE
DATE 10/10/01 BY 60322 UCBAW/STP

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

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

NMOC

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-32417		¹ Pool Code 71599; 72359		¹ Pool Name Basin Dakota; Blanco Mesquero	
⁴ Property Code 031997		⁴ Property Name State Gas Com AB			⁴ Well Number #3
⁷ OGRID No. 000778		⁴ Operator Name BP AMERICA PRODUCTION COMPANY			⁶ Elevation 5873

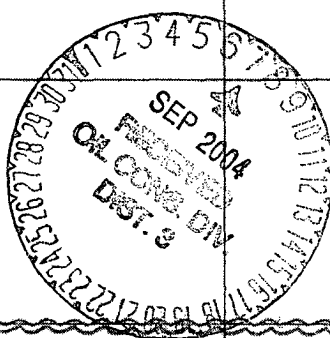
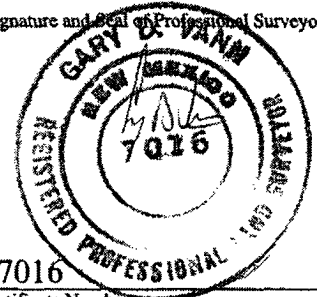
10 Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P (Lot 6)	2	29 N	10 W		680	SOUTH	795	EAST	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 317.70	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**

1253(R) Lot 4	5246(R) Lot 3	Lot 2	Lot 1 1386(R)
1184(R)			
2		1327(R)	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> <i>Cherry Hlava</i> Signature </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> Cherry Hlava Printed Name </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> Regulatory Analyst Title </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> 6-4-04 Date </div>
2653(R)		2653(R)	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. <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> May 21, 2004 Date of Survey </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> Signature and Seal of Professional Surveyor </div> </div> </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> 7016 Certificate Number </div>
5264(R)		680'	Lot 6 795' Lot 5

(R) - BLM 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
March 4, 2004

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

WELL API NO.
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 State GC AB (BLM surface owner)
8. Well Number 3
9. OGRID Number
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 CO

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

4. Well Location

Unit Letter P : 680 feet from the SOUTH line and 795 feet from the EAST line

Section 2 Township 29N Range 10W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5873' GR

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL P Sect 2 Twp 29N Rng 10W Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000'

Distance from nearest surface water > 1000' Below-grade Tank Location UL P Sect 2 Twp 29N Rng 10W ;

780' feet from the SOUTH line and 865 feet from the EAST line PLEASE SEE ATTACHED PAD LAYOUT

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 COMPLETION ☐

OTHER: PIT PERMIT ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND 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.

Bp America will construct a lined drilling pit per general construction plan on file 4/15/2004.

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 06/04/04

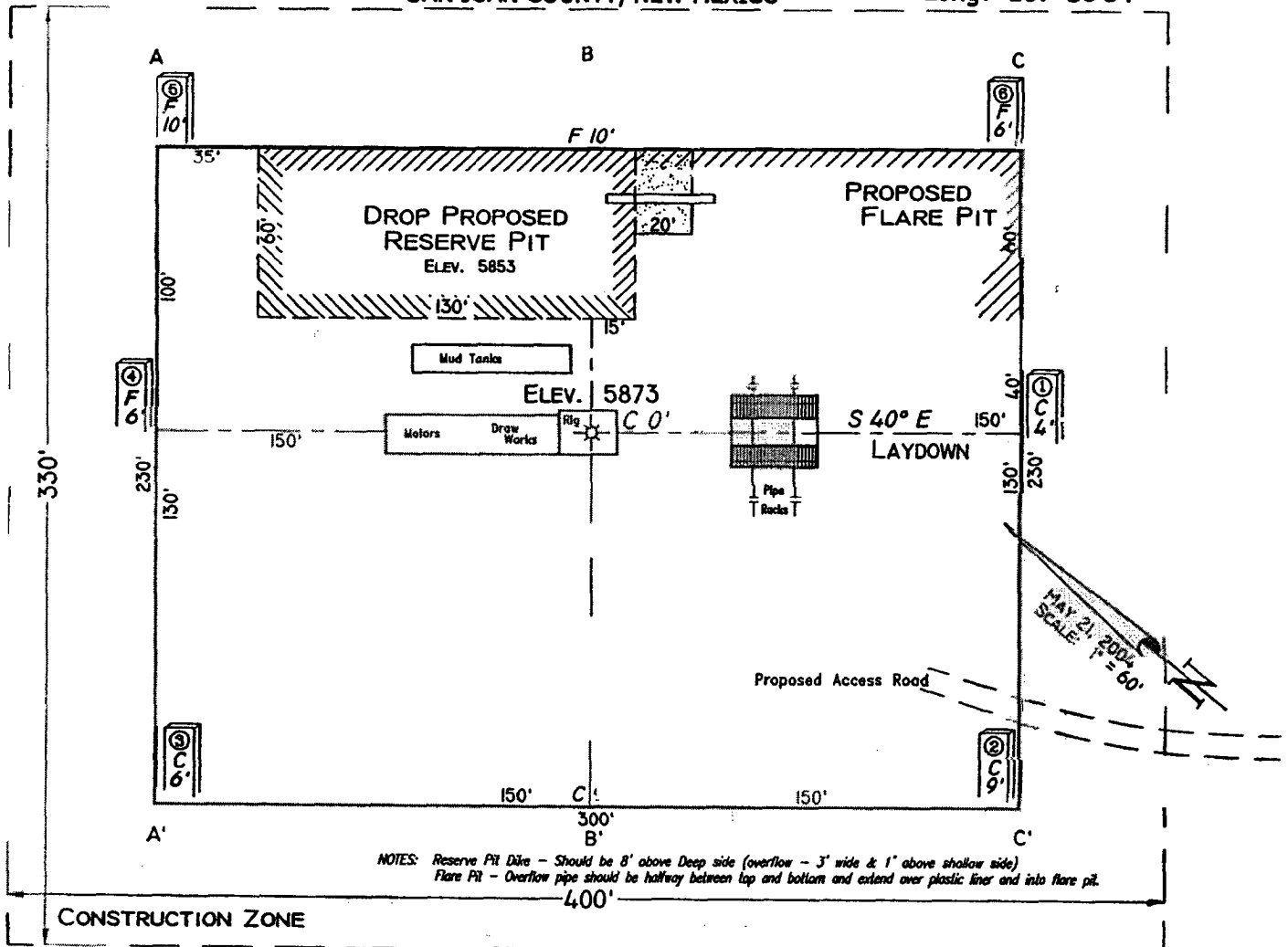
Type or print name Cherry Hlava E-mail address: Telephone No. 281-366-4081

(This space for State use)

APPROVED BY [Signature] TITLE REGULATORY ANALYST DATE SEP - 7 2004
Conditions of approval, if any:

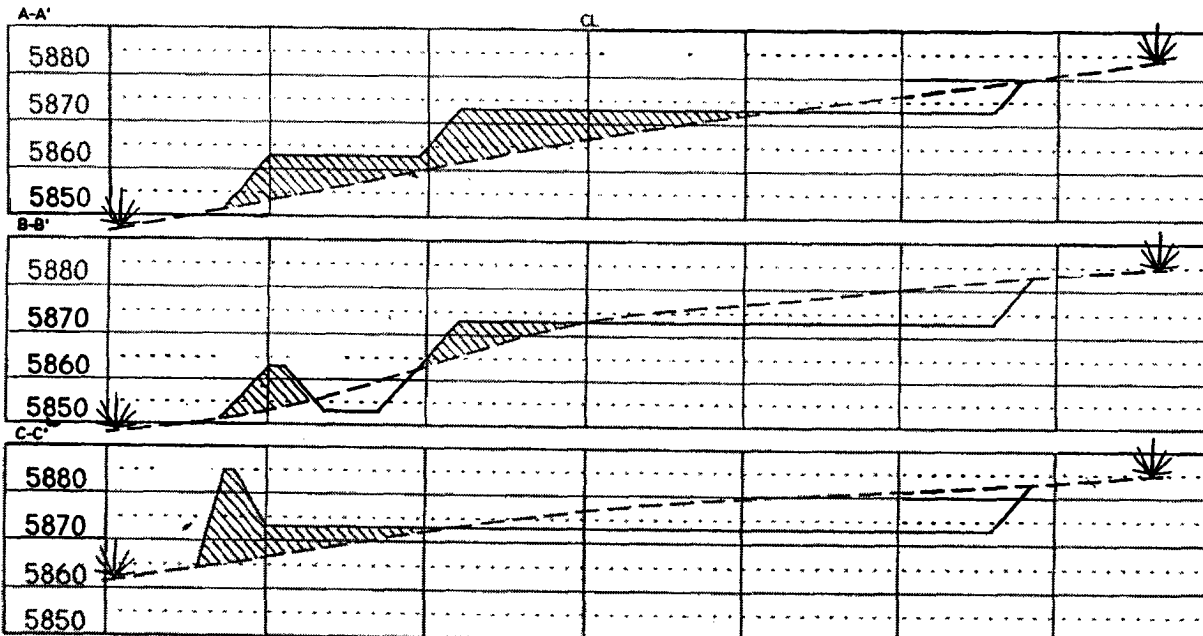
PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 State Gas Com AB # 3
 680' F/SL 795' F/EL
 SEC. 2, T29N, R10W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°44'56"
 Long: 107°50'54"



Area of Construction Zone - 330'x400' or 1.03 acres, more or less.

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



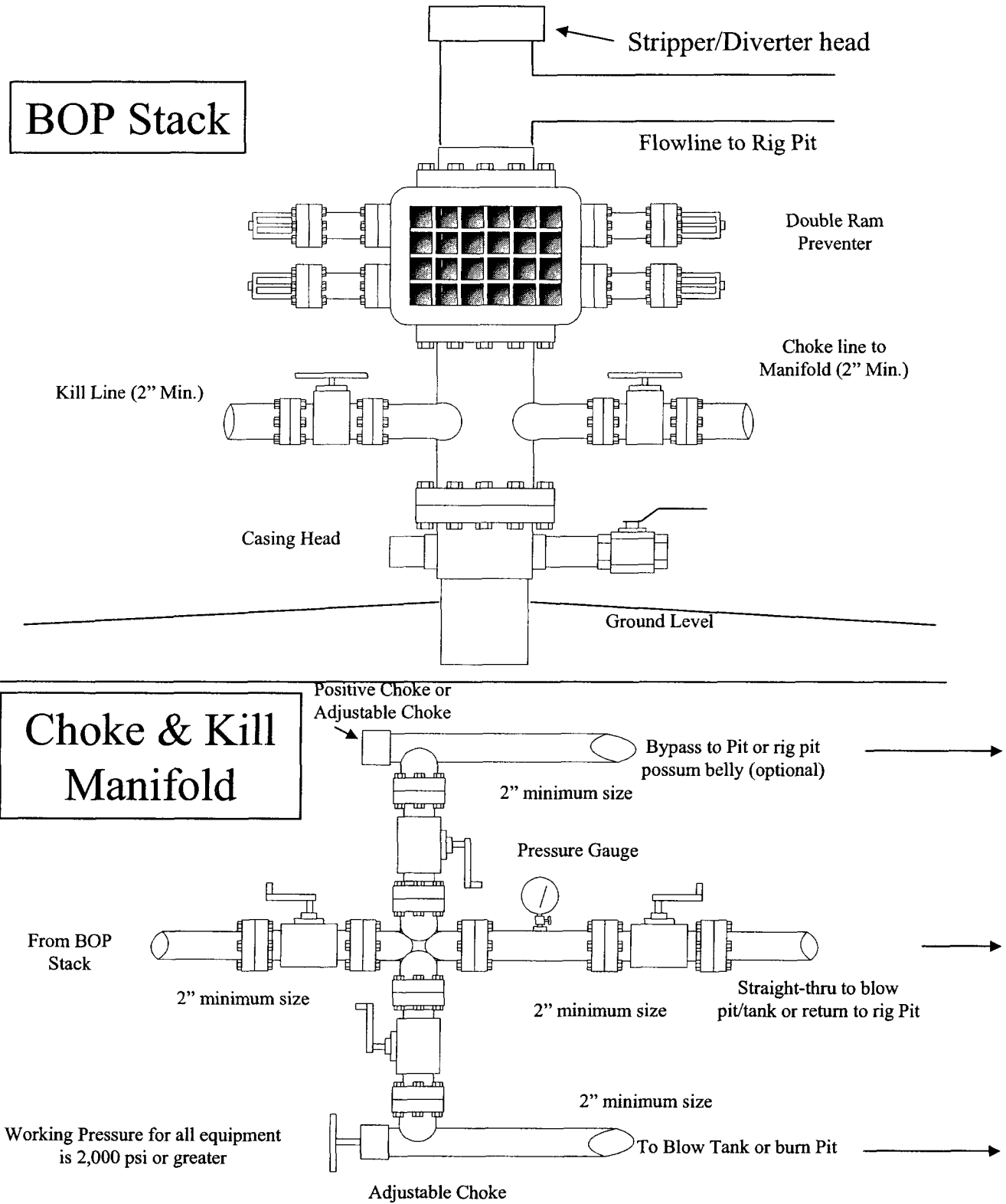
NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

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									
Lease:	State	Well No.	State GC AB #3		Field:	Basin Dakota/Blanco Mesaverde			
County:	San Juan, New Mexico	Location:	2-29N-10W: 680' FSL, 795' FEL						
Minerals:	State	BHLOC:	same						
Rig:	Aztec 184	Surface:	Lat: 36 deg, 50.86 min; Long: 107 deg 44.93 min						
OBJECT	Drill 240' below the top of the Two Wells Mbr, set 4-1/2" production casing, Stimulate DK, CH, MF, PL and CHCR intervals.								
METHOD OF DRILLING			APPROXIMATE DEPTHS OF GEOLOGICAL MARKER						
TYPE OF TOOLS	DEPTH OF DRILLING		Actual GL: 5873		Estimated KB: 5,887.0'				
Rotary	0 - TD		Marker	SUBSEA	TVD	APPROX. MD			
LOG PROGRAM			Ojo Alamo	4,745'	1,142'	1,142'			
Type - single run	Depth Interval		Kirtland	4,587'	1,300'	1,300'			
			Fruitland *	4,000'	1,887'	1,887'			
Cased Hole TDT- CBL	TD to 7" shoe		Fruitland Coal *	3,777'	2,110'	2,110'			
	Identify 4 1/2" cement top		Pictured Cliffs *	3,527'	2,360'	2,360'			
			Lewis *	3,302'	2,585'	2,585'			
			Cliff House #	2,046'	3,841'	3,841'			
			Menefee #	1,740'	4,147'	4,147'			
			Point Lookout #	1,202'	4,685'	4,685'			
			Mancos	841'	5,046'	5,046'			
			Greenhorn	-716'	6,603'	6,603'			
			Graneros (bent, mkr)	-776'	6,663'	6,663'			
			Two Wells Mbr #	-836'	6,723'	6,723'			
			Paguate Mbr #	-904'	6,791'	6,791'			
			Cubero Mbr #	-960'	6,847'	6,847'			
			L. Cubero Mbr #	-999'	6,886'	6,886'			
			Encinal Cyn Mbr#	-1,032'	6,919'	6,919'			
			TOTAL DEPTH:	-1,076'	6,963'	6,963'			
	# Probable completion interval				* Possible Pay				
			DRILL CUTTING SAMPLES		DRILLING TIME				
			FREQUENCY	DEPTH	FREQUENCY	DEPTH			
			30'/10' intervals	2685'-TD	Geologist	0 - TD			
SPECIAL TESTS									
TYPE									
None									
MUD PROGRAM:									
Approx. Interval	Type Mud	Weight, #/gal	Vis sec/qt	W/L cc's/30 min	Other Specification				
200'	Spud	8.8 - 9.0	Sufficient to clean hole.						
2,685'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite				
6,983'	Air	1	1000 cfm for hammer		Volume sufficient to maintain a stable and clean wellbore				
CASING PROGRAM:									
Casing String	Estimated Depth	Hole Size	Casing Size	Wt, Grade, Thread	Landing Point	Cement			
Surface/Cd	200'	13 1/2"	9-5/8"	32#, H-40 ST&C		cmt to surface			
Intermediate	2,683'	8-3/4"	7"	20#, J/K-55 ST&C	100' below LWIS	cmt to surface			
Production	6,983'	6-1/4"	4-1/2"	11.6#, J-55	DKOT	Cmt to 150' inside Intermediate 1			
						TOC survey required			
CORING PROGRAM:									
None									
COMPLETION PROGRAM:									
Rigless, 3-4 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	3,841'	500		0					
Point Lookout	4,685'	600		0					
Dakota	6,723'	2600		1121					
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				2-Jun-04					
Form 46 7-84bw		For Drilling Dept.				For Production Dept.			

BP American Production Company
Well Control Equipment Schematic



Cementing Program

Well Name: State GC AB 3	Field: Blanco Mesaverde / Basin Dakota
Location: 02-29N- 10W, 680' FSL, 795' FEL	API No.
County: San Juan	Well Flac
State: New Mexico	Formation: Dakota MesaVerde
	KB Elev (est) 5887
	GL Elev. (est) 5873

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	200	13.5	9.625	ST&C	Surface	NA	
Intermediate	2683	8.75	7	LT&C	Surface	NA	
Production -	6983	6.25	4.5	ST&C	2583	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	
Intermediate		7	20 K-55	3740		2270	234	0.0405	
Production -		4.5	11.6 J-55	5350		4960	154	0.0155	

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	160 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

Cementing Program

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 220 sx Class "G" Cement 556 cuft
 Slurry 1 + 3% D79 extender
 TOC@Surface + 1/4 #/sk. Cellophane Flake
 + 5 lb/sk Gilsonite

Tail 60 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 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 190 LiteCrete D961 / D124 / D154 477 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 206 cuft
 Slurry 2 + 5% D20 gel (extender)
 1437 ft fill + 0.1% D46 antifoam
 + 1/4 #/sk. Cellophane Flake
 + 0.25% D167 Fluid Loss
 + 5 lb/sk Gilsonite

Cementing Program

+0.1% d800, retarder
+0.15% D65, dispersant

Slurry Properties:	Density	Yield	Water	0.1026 cuft/ft OH
	(lb/gal)	(ft ³ /sk)	(gal/sk)	0.1169 cuft/ft csg ann
	9.5	2.52	6.38	
Slurry 1				
Slurry 2	13	1.44	6.5	Top of Mancos
				5046

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

State GC AB #3
SAN JUAN BASIN
Dakota/MV 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", 3000 psi
double ram preventer with rotating
head.

All ram type preventers and related control equipment will be hydraulically tested to 250 psi (low pressure) and 2000 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.