

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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 - 013688
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input 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.
3a. Address HOUSTON, TX 77253-3092		8. Lease Name and Well No. ATLANTIC LS 2 C
3b. Phone No. (include area code) Ph: 281.366.4081		9. API Well No. 30-045-32836
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWSE Lot 9 2105FSL 1500FEL 36.88250 N Lat, 107.83250 W Lon At proposed prod. zone NWSE Lot 9 2105FSL 1500FEL 36.88250 N Lat, 107.83250 W Lon		10. Field and Pool, or Exploratory BLANCO MESAVERDE
14. Distance in miles and direction from nearest town or post office* 11 MILES EAST FROM AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area J Sec 24 T31N R10W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 797		12. County or Parish SAN JUAN
16. No. of Acres in Lease 271.94		13. State NM
17. Spacing Unit dedicated to this well 271.94 E/L		18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
19. Proposed Depth 6124 MD 6124 TVD		20. BLM/BIA Bond No. on file WY2924
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6610 GL		22. Estimated duration 7
22. Approximate date work will start 03/15/2005		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. | 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 Ph: 281.366.4081	Date 01/20/2005
Title AGENT		
Approved by (Signature) 	Name (Printed/Typed) Office FFO	Date 5-6-05
Title AFM		

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 #53225 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the FarmingtonDRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".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 **

NMOCD

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 30-045-32836	Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 000278	Property Name Atlantic LS	Well Number # 2C
OCRID No. 000778	Operator Name BP AMERICA PRODUCTION COMPANY	Elevation 6610

Surface Location

UL or Lot No. J (Lot 9)	Section 24	Township 31 N	Range 10 W	Lot Idn	Feet from the 2105	North/South line SOUTH	Feet from the 1500	East/West line EAST	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
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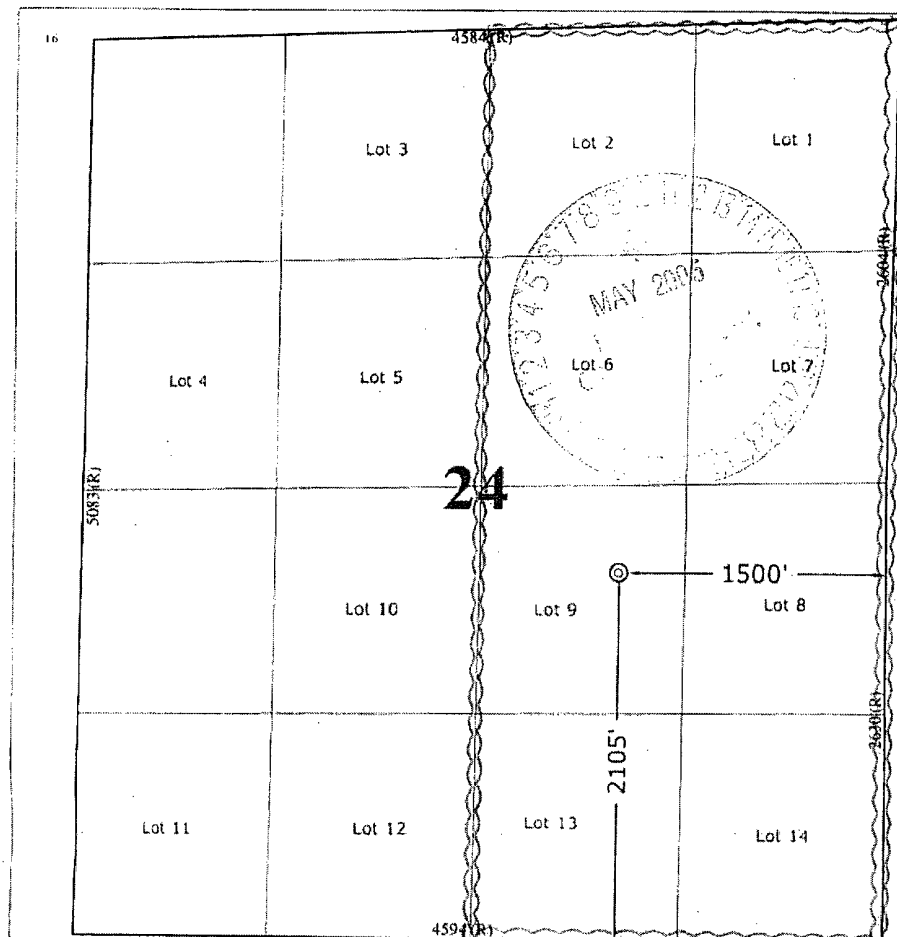
Dedicated Acres
271.94

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



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

1-20-05
Date

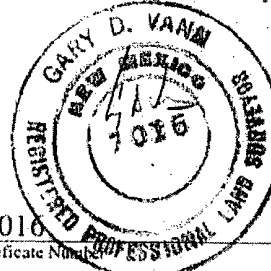
SURVEYOR CERTIFICATION

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.

December 14, 2004
Date of Survey

Date of Survey

Signature and Seal of Professional Surveyor

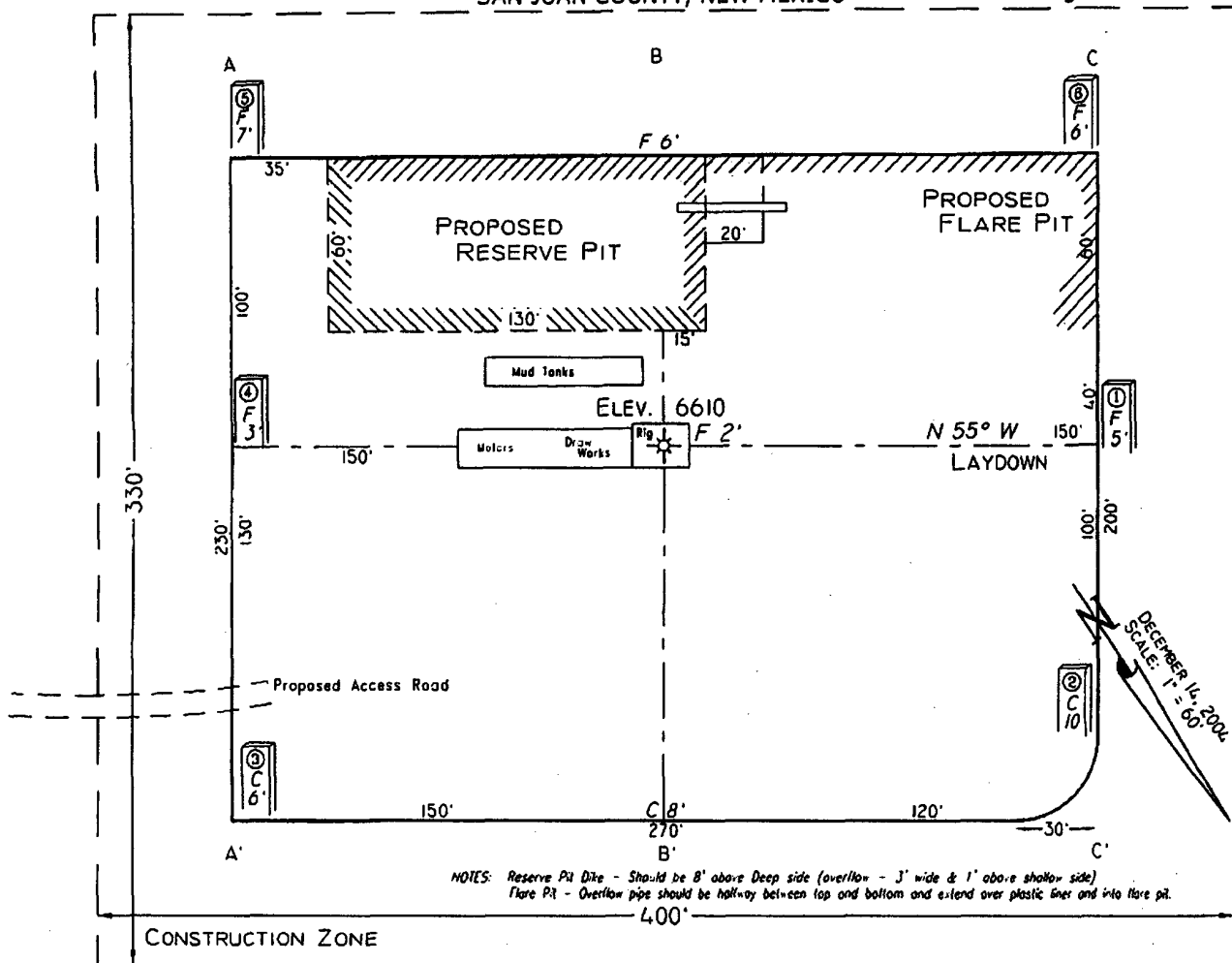


7016
Certificate Number

(R) - BLM Record

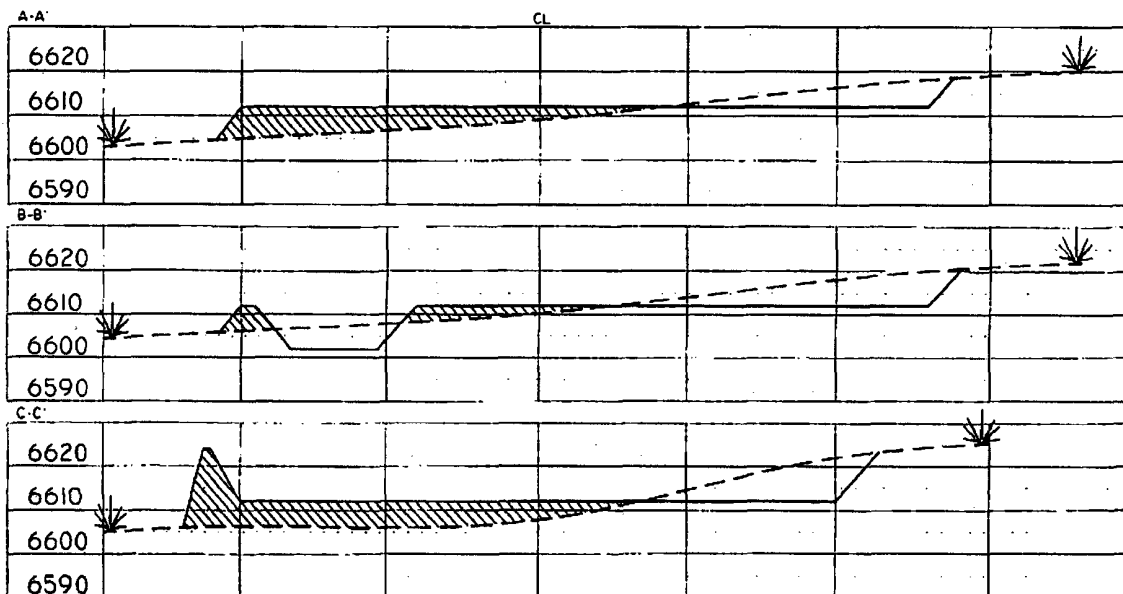
PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 Atlantic LS #2C
 2105' F/SL 1500' F/EL
 SEC. 24, T31N, R10W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

Lat: 36.8825°
 Long: 107.8325°
 Lat: 36°52'57"
 Long: 107°49'57"



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.

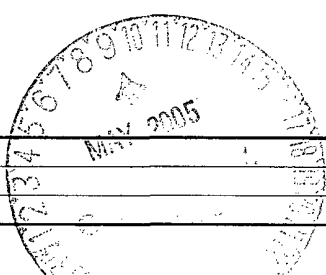
VANN SURVEYS
 P. O. Box 1306
 Farmington, NM

BP AMERICA PRODUCTION COMPANY

DRILLING AND COMPLETION PROGRAM

1/12/2005

Lease:	Atlantic LS	Well Name & No.	Atlantic LS #2C	Field:	Blanco Mesaverde
County:	San Juan, New Mexico	Surface Location:	24-31N-10W : 2105' FSL, 1500' FEL		
Minerals:		Surface:	Lat: 36.8825506 Long:-107.8318137		
Rig :	Aztec 507	BH Location:	same		
OBJECTIVE:	Drill 450' below the top of the Point Lookout, set 4-1/2" production casing. Stimulate MF, and PL intervals.				

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Actual GL: 6610	Estimated KB: 6,621.0'		
Rotary	0 - TD	Marker	SUBSEA	TVD	APPROX. MD
LOG PROGRAM		Ojo Alamo	4,572'	2,049'	2,049'
Type	Depth Interval	Kirtland	4,509'	2,112'	2,112'
Single Run		Fruitland	3,767'	2,854'	2,854'
		Fruitland Coal	3,506'	3,115'	3,115'
		Pictured Cliffs	3,231'	3,390'	3,390'
		Lewis	2,989'	3,632'	3,632'
Cased Hole		Cliff House	1,688'	4,933'	4,933'
TDT- CBL	TD to 7" shoe.	Menefee	1,338'	5,283'	5,283'
	Identify 4 1/2" cement top	Point Lookout	947'	5,674'	5,674'
REMARKS:		Mancos	646'	5,975'	5,975'
- Please report any flares (magnitude & duration). 					
		TOTAL DEPTH:	497'	6,124'	6,124'
		# Probable completion interval	* Possible Pay		

SPECIAL TESTS	DRILL CUTTING SAMPLES	DRILLING TIME
TYPE	FREQUENCY DEPTH	FREQUENCY DEPTH
	none 3,065' 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
200'	Spud	8.8 - 9.0	Sufficient to clean hole.	
3,065'	Water/LSND	8.4 - 9.0		<9
6,124'	Air	1	1000 cfm for bit	
				Other Specification
				Sweep hole while whilst water drilling, LCM onsite
				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	3,065'	8-3/4"	7"	J/K-55 ST&C	20#	50' above FT coal	cmt to surface
Production	6,124'	6-1/4"	4-1/2"	J-55	11.6#	10.5 DKOT	150' inside Intermediate - TOC survey required

CORING PROGRAM:	None
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COMPLETION PROGRAM:	Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead
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GENERAL REMARKS:	Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.
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BOP Pressure Testing Requirements			
Formation	Depth	Anticipated bottom hole pressure	Max anticipated surface pressure**
Cliffhouse	4,933'	500	0
Point Lookout	5,674'	600	0
Dakota	-	2600	-

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:	
HGJ		JMP/JLP		12-Jan-05	
Form 46 7-84bw		For Drilling Dept.		For Production Dept.	

Additional Operator Remarks
Atlantic LS 2C
APD

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 6124' and complete into the Blanco Mesaverde,

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 +/- 200 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



Cementing Program

Well Name: Atlantic LS #2C
 Location: 24-31N-10W : 2105' FSL, 1500' FEL
 County: San Juan
 State: New Mexico

Well Flac
 Formation: Mesa Verde
 KB Elev (est) 6621
 GL Elev. (est) 6610

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)
Surface	200	13.5	9.625	ST&C	Surface	NA
Intermediate	3065	8.75	7	LT&C	Surface	NA
Production -	6124	6.25	4.5		2965	2561

Casing Properties:

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	2270		1400	254	0.0787
Intermediate		7	20 K-55	3740		2270	234	0.0405
Production -		4.5	10.5 J-55	4790		4010	132	0.0159

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	100	40
Excess %, Tail	NA	0	40
BHST (est deg. F)	72	110	159
Time Between Stages, (hr)	NA	NA	NA
Special Instructions	1,6	1,6	2,6

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

Surface:

Preflush 20 bbl. FreshWater

Slurry 1 154 sx Class C Cement 195 cuft
 TOC@Surface + 2% CaCl2 (accelerator)

0.4887 cuft/ft OH
 100 % excess

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



Cementing Program

Centralizers, as needed
1 Stop Ring
1 Thread Lock Compound

Intermediate:

Fresh Water	20 bbl	fresh water	
Lead		286 sx Class "G" Cement	746 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam'	
Tail		59 sx 50/50 Class "G"/Poz	75 cuft
Slurry 2		+ 2% gel (extender)	
		0.1% D46 antifoam	
500 ft fill		+1/4 #/sk. Cellophane Flake	0.1503 cuft/ft OH
		+ 2% S1 Calcium Chloride	0.1746 cuft/ft csg ann
			80 % excess

Slurry Properties:	Density	Yield	Water
	(lb/gal)	(ft3/sk)	(gal/sk)
Slurry 1	11.7	2.61	17.77
Slurry 2	13.5	1.27	5.72

Casing Equipment: 7", 8R, ST&C

- 1 Float Shoe
- 1 Float Collar
- 1 Stop Ring
- Centralizers, as needed
- 1 Top Rubber Plug
- 1 Thread Lock Compound

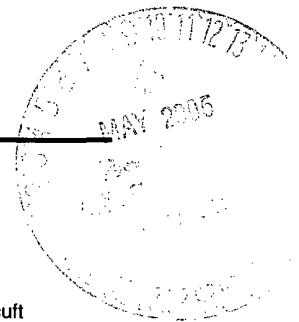
Production:

Fresh Water	10 bbl	CW100	
Slurry		184 LiteCrete D961 / D124 / D154	464 cuft
		+ 0.03 gps D47 antifoam	
		+ 0.5% D112 fluid loss	
TOC@Liner Top		+ 0.11% D65 TIC	

Slurry Properties:	Density	Yield	Water	0.1026 cuft/ft OH
	(lb/gal)	(ft3/sk)	(gal/sk)	40 % excess
Slurry	9.5	2.52	6.38	0.1169 cuft/ft csg ann

Casing Equipment: 4-1/2", 8R, ST&C

- 1 Float Shoe
- 1 Float Collar
- 1 Stop Ring
- Centralizers, as needed
- 1 Top Rubber Plug



**SAN JUAN BASIN
Blanco Mesaverde Formation
Pressure Control Equipment**

Background

The objective Mesaverde 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 Mesaverde. 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

