## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

5. Lease Serial No.

		NIMSF - 080917
APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Tribe Name
1a. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No.
lb. Type of Well: ☐ Oil Well 🙀 Gas Well ☐ Otl	ner Single Zone	Lease Name and Well No.     ATLANTIC B LS 3C
2. Name of Operator Contact:	MARY CORLEY E-Mail: corleyml@bp.com	9. API Well No. 30.045 32178
3a. Address P.O. BOX 3092 HOUSTON, TX 77253	3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700	10. Field and Pool, or Exploratory BLANCO MESAVERDE
4. Location of Well (Report location clearly and in accorded	ance with any State requirements.*)	11. Sec., T., R., M., or Blk. and Survey or Area
At surface SWSE Lot 19 720FSL 244 At proposed prod. zone	5FEL 36.50700 N Lat, 107.53100 W Lon	Sec 4 T30N R10W Mer NMP SME: BLM
14. Distance in miles and direction from nearest town or post 7.5 MILES FROM AZTEC, NEW MEXICO	office*	12. County or Parish 13. State SAN JUAN NM
15. Distance from proposed location to nearest property or	16. No. of Acres in Lease	17. Spacing Unit dedicated to this well
lease line, ft. (Also to nearest drig. unit line, if any) 720	320.26	320.26 8/2
18. Distance from proposed location to nearest well, drilling,	19. Proposed Depth	20. BLM/BIA Bond No. on file
completed, applied for, on this lease, ft.	5756 MD	WY2924
21. Elevations (Show whether DF, KB, RT, GL, etc. 6448 GL	22. Approximate date work will start 03/03/2004	23. Estimated duration 5 DAYS
	24. Attachments	
The following, completed in accordance with the requirements of	of Onshore Oil and Gas Order No. 1, shall be attached to	this form:
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys SUPO shall be filed with the appropriate Forest Service Of</li> </ol>	Item 20 above).  5. Operator certification	ons unless covered by an existing bond on file (see
25. Signature (Electronic Submission)	Name (Printed/Typed) MARY CORLEY	Date 02/16/2004
Title AUTHORIZED REPRESENTATIVE		· .
Approved by (Signature)	Name (Printed/Typed) Acting field Manager	- Muesos A/zi/of
Title	Office	·
Application approval does not warrant or certify the applicant ho operations thereon. Conditions of approval, if any, are attached.	lds legal or equitable title to those rights in the subject le	ase which would entitle the applicant to conduct
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, 1 States any false, fictitious or fraudulent statements or representat		make to any department or agency of the United
Additional Operator Remarks (see next page)		

Electronic Submission #27943 verified by the BLM Well Information System For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

ORILLING 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

NMOCD

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

C.O.A - compliance WRole 50

District I PO Box 1980, Hobbs NM 88241-1980 District II PO Drawer KK, Artesia, NM 87211-07

District II
PO Drawer KK., Artesia, NM 87211-0719
District III

1000 Rio Brazos Rd., Axesc, NM 87410 District IV

PO Box 2088, Same Fe, NM 87504-2088

State of New Mexico
Eacrgy, Minerals & Nameal Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 T-863 P.002/005 F-870

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

Property Cone			WE	LL LOC			EAGE DEDIC	AIIO				
Property Name   Property Nam	Z100	Minimer S	2178	72	319		LANCO ME	sa <u>ve</u>				
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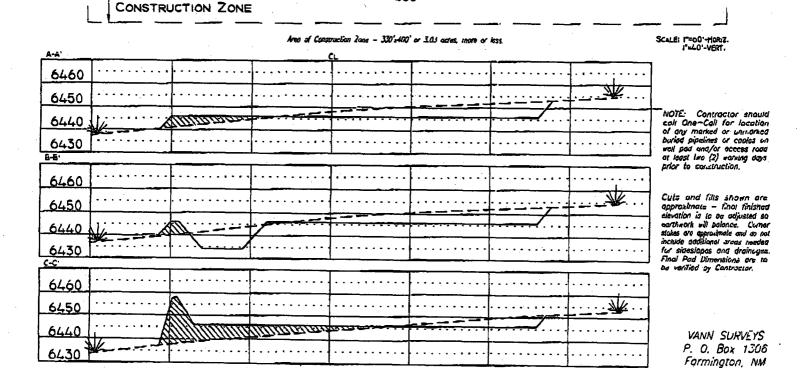
(a)

Proposed Access Road

#### PAD LAYOUT PLAN & PROFILE BP AMERICA PRODUCTION COMPANY Atlantic B LS #3C

720' R/SL 2445' F/EL

36°50'07" SEC. 4, T30N, R10W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO Lat: Long: 107°53'15" 8 C PROPOSED FLARE PIT PROPOSED Ž٥٠ RESERVE PIT Mud Tanks ELEV. 6448 N 70° W 150 LAYDOWN Pips 150 150 NOTES: Reserve Pit Dike - Should be 8' above Deep side (overflow - 3' wide & 1' above shallow side)
Fixe Pit - Overflow pipe should be helitary between top and believe and extend over plastic liner and into flore pil.



400

#### **BP AMERICA PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM**

Prospect Name: Atlantic B LS

Atlantic B LS Lease:

Well No:

**Surface Location:** 4-30N-10W; 1720 FSL, 2445 FEL

County: San Juan State: **New Mexico** 

Field: Blanco Mesaverde

Date: November 13, 2003

	w the top of the Point Lookout Sa OD OF DRILLING	inusione, set Z	APPROXIMA				
TYPE OF TOOLS	DEPTH OF DRILLII	NG	Estimated C			stimated KB:	6462
Rotary	0 - TD		MARKER		SUB	SEA	TVD
	G PROGRAM		Ojo Alamo	İ	47	12	1750
TYPE	DEPTH INVERAL		Kirtland		46	12	1850
OPEN HOLE		7	Fruitland		390	08	2554
None			Fruitland Coal	*	362	29	2833
			Pictured Cliffs	* .	. 332	25	3137
•			Lewis	*	314	46	3316
CASED HOLE			Cliff House	#	184	40	4623
GR-CCL	TD to 5 1/2" shoe		Menefee	#	153	31 [	4931
			Point Lookout	#	110	06	5356
			Mancos	1	81	2	5650
REMARKS:		•					
- Please report any flares (m	agnitude & duration).		,				
			,				
			TOTAL DEPTH		70	6	5756
		•	# Probable com	pletion inter	/al '	* Possible Pay	
SPI	ECIAL TESTS		DRILL CUTT	NG SAMP	LES	DRILLING	TIME
TYPE		•	FREQUENCY	DEPTH	F	REQUENCY	DEPT
None			None	Production	hole G	eolograph	0-TD
REMARKS:					•	· · · · · · · · · · · · · · · · · · ·	
MUD PROGRAM:		******	<u> </u>		<del></del>		
Approx. Interval	Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/	30 min	Other Spec	ification
0 - 120	Spud	8.6-9.2					
				_			

Approx.	Into	erval		Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification
0	-	120		Spud	8.6-9.2			
120	-	2783	(1)	Water/LSND	8.6-9.2		<6	
2783	_	5756		Gas/Air/N2/Mist	Volume su	fficient to maint	ain a stable and clea	n wellbore

#### **REMARKS:**

(1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.

CASING PROGRAM: (	Normally, tubular goods a	llocation letter specific	es casing sizes to be	used. Hole	sizes will be gove	erned by Contract)
Casing String	Estimated Depth	Casing Size	Grade	Weight	Hole Size	Landing Pt, Cmt, I
Surface/Conductor	120	8 5/8"	X-42 ST&C	20#	12.25"	1
Intermediate 1	2783	5 1/2"	J -55 ST&C	15.5#	7.875"	1,2
Production	5756	2 7/8"	J-55	6.5#	4.75"	3,4

#### REMARKS:

- (1) Circulate Cement to Surface
- (2) Set casing 50' above Fruitland Coal
- (3) Bring cement 100' above 5 1/2" shoe
- (4) 100' Overlap

#### **CORING PROGRAM:**

None

#### **COMPLETION PROGRAM:**

Rigless, 2-3 Stage Limited Entry Hydraulic Frac

# **BP America Production Company BOP Pressure Testing Requirements**

Well Name: Atlantic B LS

County: San Juan

3 C

State: New Mexico

Formation	Estimated TVD/MD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1750		
Fruitland Coal	2833		
PC	3137		
Lewis Shale	3318	·	
Cliff House	4623	500	0
Menefee Shale	4931		
Point Lookout	5356	600	0
Mancos	5650		

<sup>\*\*</sup> Note: Determined using the following formula: ABHP - (.22\*TVD) = ASP

Requested BOP Pressure Test Exception: 750 psi

## SAN JUAN BASIN 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 double ram type arrangement. Regional drilling rigs 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

9", 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 750 psi (high pressure), upon installation, following any repairs or equipment replacements, or at 30 day intervals. Accessories to BOP equipment will include kelly cock with a handle available, floor safety valves and choke manifold which will also be tested to equivalent pressure.

#### FEDERAL CEMENTING REQUIREMENTS

- All permeable zones containing fresh water and other usable water containing 10,000 PPM or less total dissolved solids will be isolated and protected from contamination by cement circulated in place for the protection of permeable zones per the NTL-FRA 90-1 Section III A.
- 2. The hole size will be no smaller than 1 ½" larger diameter than the casing O.D. across all water zones.
- 3. An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement.
- 4. An adequate number of casing centralizers will be run through usable water zones to ensure that the casing is centralized through these zones. The adequate number of centralizers to use will be determined by API SPEC 10D.
- 5. Centralizers will be used just below and into the base of the lowest usable water zone.
- 6. A chronological log will be kept recording the pump and slurry information and will be sent to the BLM with the subsequent sundry.

### **Cementing Program**

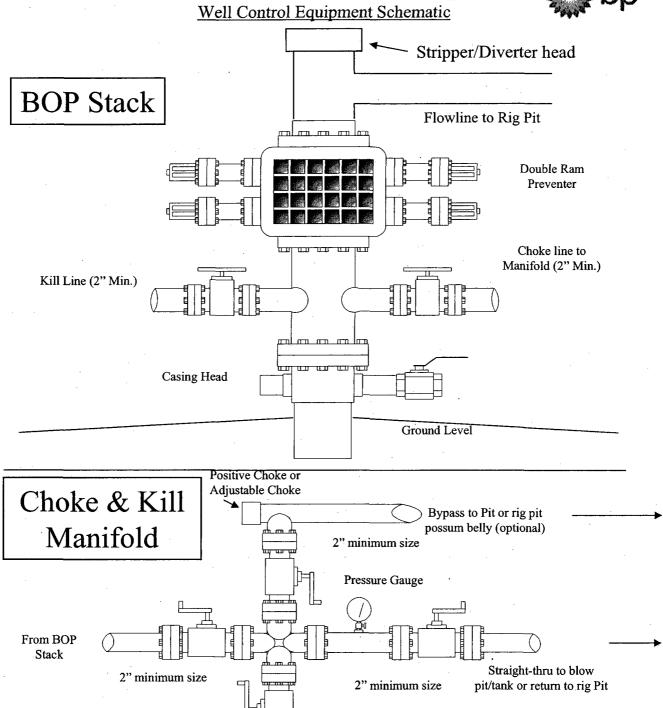
	Slurry 1	(lb/gal) 15.8		(ft3/sk) 1.16		(ga	al/sk)	4.95			
Slurry Properties:		Density		Yield			ater				
			0.1% D46 antif		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	audil				% exce	
	TOC@Surface		+ 3% CaCl2 (a 0.25 #/sk Cello	,	(lost circulat	ion addit	ive)		n 3061	cuft/ft C	)H
	Slurry 1	90	sx Class G Ce						95	cuft	
ourlace:	Preflush		20 bbl.	FreshWate	er						
Surface:										-	
	8. If cement is not	t circulated to s	surface, run ten	np. survey 10-	-12 hr. after	landing p	olug.			٠	
•	7. 1" cement to su				401 6						
	6. Confirm densite		-								
	5. Record Rate, F		Density on 3.5"	disk							
	Reverse out     Run Blend Tes	t on Cement									
	<ol> <li>Wash pumps a</li> <li>Reverse out</li> </ol>	ınd lines.									
	1. Do not wash pr	•									
Special Instruction	•		1,6		1,6				2,6		
Time Between Sta			NA		NA				NA		
Excess %, raii BHST (est deg. F)	1		NA 72		110				40 159		
Excess %, Lead Excess %, Tail			100 NA		100 0				40 40		
F			Surface		Intermedi	ate			Production		
Cementing Progra	m:		<del> </del>								
· · · =			!							<u>.</u> .	
SCP - ICP ICP - TD	Water/LSND Gas/Air Mist	8.6-9.2 NA									
0 - SCP SCP - ICP	Water/Spud Water/LSND	8.6-9.2		Fluid Loss	<6						
Apx. Interval (ft.)	Mud Type	Mud Weight		Recomme	nded Mud F	roperties	FIIO CE	rnent	mg:		
Mud Program	Mud Turn	Mond Marinto				Danie at	- D-4 - C				
Production -	2 7/8		J-55	7264		7676	•	72	0.00579		2.37
Intermediate	5 1/2		J55	4810		4040		202	0.00308		5.06
Surface	(in.) 8 5/8	(lb/ft) : 24	X42	(psi.) 2950	(psi.)	1370	000 lbs.)	244	(bbl/ft.) 0.06368	(in.)	7.97
Casing String	Size	•	Grade	Burst	Collapse		ont St.		Capacity	Drift	
Casing Propertie			ctor Included)							<del></del>	
Production -	5756	4 3/4	2 7/8		2683	N.					
Surface Intermediate	<u>120</u> 2783	- 12 1/4 - 7 7/8	8 5/8 5 1/2	ST&C ST&C	Surface	N.					
Curface	(ft.)	_(in.) 	(in.)	CT.C	(ft.) Surface		r TOL (ft. ^	.)			
Casing String	Est. Depth	Hole Size	Casing Size	Thread	TOC		age Tool				
Casing Program			<del> </del>	·							
					GL Elev. (e	st)	(	6448			
					KB Elev (es	st)	(	6462			
State:	New Mexico				Formation:	N	lesaVerd	le			
Location: County:	04-30N-10W, 173 San Juan	20' FSL, 2445'	FEL		API No. Well Flac						

## **Cementing Program**

	Fresh Water		20 bbl	fresh water		•
				000 - 01 #0# 0		774 4
	Lead			300 sx Class "G" Cer		774 cuft
	Slurry 1			+ 3% D79 extend		
	TOC@Surface			+1/4 #/sk. Cellop + 0.1% D46 antif		
				70 sx 50/50 Class *(		
	Tail			+ 2% gel (extend		87 cuft
	Slurry 2			0.1% D46 antifoa	•	0, can
	-	00 ft fill		+1/4 #/sk. Cellop		0.1733 cuft/ft OH
		· · · · · · · · · · · · · · · · · ·		+ 2% S1 Calcium		0.2009 cuft/ft csg ann
4.						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	
Production:		<del> </del>		· .		
	Fresh Water		10 bbl	CW100		
	Slurry			140 LiteCrete D961 /	D124 / D154	
				+ 0.03 gps D47 a	ntifoam	337 cuft
				+ 0.5% D112 fluid	d loss	
	TOC@Liner To	p		+ 0.11% D65 TIC		
			*.			·
						0.078 cuft/ft OH
Slurry Properties:		Density		Yield	Water	40 % excess
		* (III-/IV		(ft3/sk)	(gal/sk)	0.0886 cuft/ft csg ann
		(lb/gal)		(IIO/SK)	(yarsk)	0.0000 culvit csg ann

## **BP** American Production Company





Adjustable Choke

Working Pressure for all equipment

is 2,000 psi or greater

2" minimum size

To Blow Tank or burn Pit