Form 3160-3 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

BUREAU OF LAND	5. Lease Serial No. NMSF - 080917			
APPLICATION FOR PERMIT	6. If Indian, Allottee or Tribe Name			
1a. Type of Work: ☑ DRILL ☐ REENTER	APR 2004	7. If Unit or CA Agreement,		
1b. Type of Well: ☐ Oil Well   ☐ Ot	r <sub>ec</sub> .≃	Lease Name and Well No.     ATLANTIC B LS 2B	•	
Name of Operator Contact: BP AMERICA PRODUCTION COMPANY	MARY CORLEY, E-Mail: corleyml@bp.com	9. API Well No.	7077	
3a. Address P.O. BOX 3092 HOUSTON, TX 77253	3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700	3004536 10. Field and Pool, or Exploi BLANCO MESAVER	ratory DE	
4. Location of Well (Report location clearly and in accord	ance with any State requirements.*)	11. Sec., T., R., M., or Blk. a	and Survey or Area	
At surface SENW Lot F 1815FNL 193 At proposed prod. zone	30FWL 36.50600 N Lat, 107.53400 W Lon	FSec 4 T30N R10W M SME: BLM	ler NMP	
14. Distance in miles and direction from nearest town or post 7 MILES FROM AZTEC, NEW MEXICO	office*	12. County or Parish SAN JUAN	13. State NM	
<ol> <li>Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 680</li> </ol>	16. No. of Acres in Lease 319.29	17. Spacing Unit dedicated to this well 319.29 \( \sqrt{2} \)		
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.</li> <li>1237</li> </ol>	19. Proposed Depth 5681 MD	20. BLM/BIA Bond No. on file WY2924		
21. Elevations (Show whether DF, KB, RT, GL, etc. 6375 GL	22. Approximate date work will start 01/18/2004	23. Estimated duration 5 DAYS		
	24. Attachments			
ne following, completed in accordance with the requirements	of Onshore Oil and Gas Order No. 1, shall be attached to	this form:		
Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Sys SUPO shall be filed with the appropriate Forest Service Of	Item 20 above).	ons unless covered by an existing formation and/or plans as may be	`	
25. Signature (Electronic Submission)	Name (Printed/Typed) MARY CORLEY		Date 12/17/2003	
Title AUTHORIZED REPRESENTATIVE			111	
Approved by (Signature)	Name (Printed/Typed)		Date	
Title	Office			
Application approval does not warrant or certify the applicant he operations thereon. Conditions of approval, if any, are attached.	I olds legal or equitable title to those rights in the subject le	ease which would entitle the app	olicant to conduct	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, States any false, fictitious or fraudulent statements or representa	make it a crime for any person knowingly and willfully to	o make to any department or ag	ency of the United	

Additional Operator Remarks (see next page)

Electronic Submission #26228 verified by the BLM Well Information System For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

The action is subject to technical and review pursuant to 43 OFF 3185 8

BRG appeal pursuant to 43 CFR 5166.4

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

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

Distract I PO Box 1980, Hobbs NM 88241-1980 District II PO Drawer KK, Arteaia, NM 87211-0719 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV

#### 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

#### PO Box 2088, Santa Pe, NM 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Pool Code 72319 Well Number #2B Atlantic B LS 000 288 1 Operator Name Elevation 6375 **BP AMERICA PRODUCTION COMPANY** 000 779 **Surface Location** Feet from the North/South line Feet from the East/West line County Township Lor ldn UL or Lot No. Range WEST SAN JUAN 30 N 10 W 1815 NORTH 1930 F (Lot 10) 4 "Bottom Hole Location If Different From Surface Section Range Lot Idn East/West line County 7 LH, or lot no. Township First from the North/Scouth line Dedicated Acres Joint or Infill " Consolidation Code 319,29 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 Atlantic B LS 2 Atlantic B LS 2A 30-045-22988 30-045-09966 I hereby certify that the information contained herein is 990' FNL & 990' FEI true and complete to the best of my knowledge and belief. 1010' FNL & 990' FWT Lot 7 Lot 6 Lot 5 1815 1930' Lot 12 Lot 11 Lot 9 Lot 10 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. November 3, 2003 Lot 16 Lot 15 Lot 14 Lot 13 Date of Survey Signature and Stal & Profession Surveyor Lot 17 Lat 18 Lat 19 Lot 20 FTS 1874 N Certificate Number 2635(R)

## **BLM CONDITIONS OF APPROVAL**

**Operator:** BP America Production Company

Well Name: Atlantic B LS 2B

**Legal Location**: 1815' FNL, 1930' FWL; sec. 4, T30N, R10W

Lease No.: NMSF 080917

Please adhere to the previously issued stipulation:

This well is located within a "venerable area". In order to protect the integrity of the alluvium aquifer, a MINIMUM surface casing setting depth of 200' is stipulated as a condition of approval for this APD.

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

Prospect Name: Atlantic B LS

Well No: 2 B

Lease: Atlantic B LS
County: San Juan

Surface Location: 4-30N-10W; 1815 FNL, 1930 FWL

State: New Mexico

Field: Blanco Mesaverde

Date: November 13, 2003

OBJECTIVE: Drill 400' b	elow the top o	<u> </u>	ookout Sandstone, se	et 2 7/8" production	long string	Stimulate CH	I. MF and PL	intervals			
		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER									
TYPE OF TOOLS	METHOD OF DRILLING DOLS DEPTH OF DRILLING					375	Estimate				
Rotary		- TD	D. (	MARKE			SUBSEA TVD				
	Oio Alamo	"`		4714	1675						
TYPE	LOG PROC	EPTH INVE	RAL	Kirtland			4617	1772			
OPEN HOLE	_			Fruitland			3900	2489			
None				Fruitland Co	al	*	3633	2756			
				Pictured Clin		*	3329				
04055 11015				Lewis	i	*	3150	3239			
CASED HOLE GR-CCL	T	D to 5 1/2" s	shoo	Cliff House Menefee		# #	1844 1531	4545 4858			
GR-CCE	• •	D 10 3 1/2 3	Silve	Point Looko		¥	1108	5281			
				Mancos			817	5572			
REMARKS:											
- Please report any flares	(magnitude	& duration)									
							708	5681			
				# Probable		interval					
	SPECIAL TESTS					# Probable completion interval * Possible Pay  DRILL CUTTING SAMPLES DRILLING TIME					
TYPE						PTH	FREQUENCY DEPTH				
None	• • • •			None	1			I			
REMARKS:											
MUD PROGRAM:											
Approx. Interval		Type Mud	Weight, #/gal	Vis, sec/c	s, sec/qt   W/L cc		n Other	Specificatio	n		
0 , - 120 20		Spud	8.6-9.2								
1 <b>20 200</b> - 2706 2706 - 5681	` '	Water/LSN Gas/Air/N2		sufficient to ma	<6 intain a st	able and c	lean wellbo	ore			
REMARKS:											
(1) The hole will require	sweeps to	keep unlo	aded while fresh	water drilling.	Let hole o	onditions o	dictate freq	uency.			
CASING PROGRAM:				es casing sizes to I							
Casing String		ed Depth		Grade	Weight			ding Pt, Cmt,	Etc.		
Surface/Conductor	2	00 120		X-42 ST&C	20		.25"   1				
Intermediate 1		2706	5 ½"	J -55 ST&C	15.5		375"   1,2				
Production	<u> </u>	5681	2 7/8"	J-55	6.5	<del>7</del>   4	.75" 3,4				
REMARKS:	Curfoss										
<ul><li>(1) Circulate Cement to</li><li>(2) Set casing 50' above</li></ul>		Coal									
(3) Bring cement 100' a											
(4) 100' Overlap	DUVE J 1/2	31100									
CORING PROGRAM:											
None											
COMPLETION PROGR	RAM:										
Rigless, 2-3 Stage Limit		ydraulic Fr	ac								
GENERAL REMARKS:							•				
Notify BLM/NMOCD 24	hours prior	to Spud, I	BOP testing, and	Casing and Co	ementing.						
Form 46 Reviewed by:				ging program r		y: N/A	4				
PREPARED BY:	······································	APPR		DATE:							
HGJ/MNP/JMP											
Form 46 12-00 MNP				Versio	n 1.0				·		

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

Well Name: Atlantic B LS

County: San Juan

2 B

State: New Mexico

Formation	Estimated TVD/MD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1675		
Fruitland Coal	2756		
PC	3060		
Lewis Shale	3239		
Cliff House	4545	500	0
Menefee Shale	4858		
Point Lookout	5281	600	0
Mancos	5572		

<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**

## <u>Interval</u>

#### **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.

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

FORM APPROVED OMB NO. 1004-0135 Expires: November 30, 2000

5. Lease Serial No. NMSF080917

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIE	ZOZ	7. If Unit or CA/Agreement, Name and/or No						
Type of Well     Oil Well				8. Well Name and No. ATLANTIC B LS 2B				
2. Name of Operator BP AMERICA PRODUCTION		MARY CORLE E-Mail: corleym	TO SEP. AMP 20	004	9. API Well No. 30-045-32077-00-X1			
3a. Address P. O. BOX 3092 HOUSTON, TX 77253		3b. Phone No. Ph: 281 366 Fx: 281 366.		de) (9)		ind Pool, or Exploratory CO MESAVERDE		
4. Location of Well (Footage, Sec., T	, R., M., or Survey Descriptio	n) \(\sigma_{<}	5		11. County or Parish, a	nd State		
Sec 4 T30N R10W SENW Lot 36.50600 N Lat, 107.53400 W	F 1815FNL 1930FWL Lon	\	COMMENT OF THE PROPERTY OF THE		SAN JUAN COU	NTY, NM		
12. CHECK APPR	OPRIATE BOX(ES) TO	O INDICATE	NATURE OF	NOTICE, RI	EPORT, OR OTHER	DATA		
TYPE OF SUBMISSION			OF ACTION					
NI-4:CI-44	Acidize	Deep	en	☐ Product	ion (Start/Resume)	☐ Water Shut-Off		
Notice of Intent  ■ Notice of Intent	☐ Alter Casing		ure Treat	☐ Reclam		☐ Well Integrity		
☐ Subsequent Report	Casing Repair	_	Construction	☐ Recomp		_		
Final Abandonment Notice	Change Plans		and Abandon	_	arily Abandon	Other Change to Original A		
<u> </u>	Convert to Injection			☐ Water I		PD .		
testing has been completed. Final At determined that the site is ready for f Original APD submitted on 12 BP America submits for your a well. Please reference attached However, should conditions of drill the subject well with air/ai using approximately 90 CU/FT BHST READY MIX CMT	inal inspection.)  /10/2003, EC Submissio  approval amendements to cementing report for depending the company of the company o	n 25962. Pern o our surface d letailed informa alternate to co ud and preset	nit Pending. cementing pro ation. conventional dr the surface ca	ogram for the s rilling program asing 1.61 CF/SK Y	subject	PPROVAL		
14. Thereby certify that the foregoing is	true and correct.  Electronic Submission For BP AMERIC nitted to AFMSS for proce	A PRODUCTION	N ČO, sent to t	the Farmingtor	า ้ำ			
Name (Printed/Typed) MARY CC	PRLEY		Title AUTH	IORIZED REF	PRESENTATIVE	· · · · · · · · · · · · · · · · · · ·		
Signature (Electronic S			Date 02/18					
	THIS SPACE F	OR FEDERA	L OR STATI	E OFFICE U	SE			
Approved By			Title			Date 3-2 400L		
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conditions.	uitable title to those rights in the	ne subject lease	Office					
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S.C. Section 1212, make it statements or representations a	a crime for any pe	rson knowingly: thin its jurisdicti	and willfully to n	nake to any department or	agency of the United		

# **Cementing Program**

Well Name: Location: County: State:	Atlantic B LS 2E 04-30N-10W, 18 San Juan New Mexico		FWL		Field: API No. Well Flac Formation: KB Elev (e GL Elev. (e	st)		de		
Casing Program:						<del></del>				···········
Casing String	Est. Depth	Hole Size	Casing Size	Thread	TOC	Stage Too				
Surface	(ft.)	(in.) 12 1/4	(in.) 8 5/8	ST&C	(ft.) Surface	Or TOL (ft.	.)			
Intermediate	2706	7 7/8	5 1/2	ST&C		NA NA				
Production -	5681	- 4 3/4	2 7/8	0140	2606	NA NA				
Casing Propertie		(No Safety F	actor Included)		,					
Casing String	Size	Weight	Grade	Burst	Collapse	Joint St.		Capacity	Drift	
	(in.)	(lb/ft)		(psi.)	(psi.)	(1000 lbs.)		(bbl/ft.)	(in.)	
Surface	8 5/	-	4 X42	2950		1370	244	0.06368		7.972
Intermediate	5 1/		5 J55	4810		4040	202	0.0238		5.067
Production -	2 7/	/8 6.	5 J-55	7264		7676	72	0.00579		2.375
Mud Program		· · · · · · ·								
Apx. Interval (ft.)	Mud Type	Mud Weight		Recomm	ended Mud	Properties Prio Ce	menti	ng:		
0 - SCP	Water/Spud	8.6-9.	2	Fluid Los	< < 6					
SCP - ICP	Water/LSND	8.6-9.		i idio Eoo						
ICP - TD	Gas/Air Mist	0.0 0.								
			=							
Cementing Progra	m:									
			Surface		Intermed	diate		Production		
Excess %, Lead			100		100	1		40		
Excess %, Tail			NA		0			40		
BHST (est deg. F)			72		110			159		
Time Between Sta	•		NA 1.6		NA 1.6			NA 2.6		
Special Instruction	1. Do not wash	numne and line	1,6		1,6			2,6		
	2. Wash pumps	• •	<del>3</del> 5.							
	3. Reverse out	and inies.								
	4. Run Blend Te	est on Cement			*					
			Density on 3.5"	disk						
			ressurized mud							
	7. 1" cement to	surface if ceme	ent is not circulat	ed.						
	8. If cement is r	not circulated to	surface, run ter	np. survey 1	0-12 hr. afte	r landing plug.				
	<u></u>	· · · · · · · · · · · · · · · · · · ·								
Surface:										
Surface:	Preflush		20 bbl.	FreshWa	iter			(0)	e e	
Surface:	Preflush Slurry 1	8	20 bbl. 0 sx Class C Ce		iter			(O) 95	<b>2</b> /	
Surface:	Slurry 1	8	0 sx Class C Ce	ment	iter			(0°) 2 <sup>95</sup>	<b>2</b> Cuft	
Surface:	•	8	0 sx Class C Ce + 2% CaCl2 (a	ment accelerator)		lation additive)		_		ОН
Surface:	Slurry 1	8	0 sx Class C Ce + 2% CaCl2 (a	ment accelerator) ophane Flak		lation additive)		0.3961		
Surface: Slurry Properties:	Slurry 1	8 Density	0 sx Class C Ce + 2% CaCl2 (a 0.25 #/sk Cello	ment accelerator) ophane Flak		lation additive) Water		0.3961	cuft/ft	
	Slurry 1		0 sx Class C Ce + 2% CaCl2 (a 0.25 #/sk Cello	ment accelerator) ophane Flak foam		·		0.3961	cuft/ft	

Intermediate:

## **Cementing Program**

Fresh Water

20 bbl

fresh water

Lead Slurry 1

TOC@Surface

290 sx Class "G" Cement + 3% D79 extender +1/4 #/sk. Cellophane Flake

+ 0.1% D46 antifoam' 70 sx 50/50 Class "G"/Poz

Tail Slurry 2

500 ft fill

+ 2% gel (extender) 0.1% D46 antifoam

+1/4 #/sk. Cellophane Flake + 2% S1 Calcium Chloride

87 cuft

0.1733 cuft/ft OH 0.2009 cuft/ft csg ann 80 % excess

Slurry Properties:

Density

(lb/gal) 11.7 Yield (ft3/sk) 2.61 Water (gal/sk)

Slurry 1 Slurry 2

13.5

1.27

17.77 5.72

Production:

Fresh Water

10 bbl

CW100

Slurry

140 LiteCrete D961 / D124 / D154 + 0.03 gps D47 antifoam

+ 0.5% D112 fluid loss

TOC 200 ft in 5 1/2"

+ 0.11% D65 TIC

350 cuft

Slurry Properties:

Slurry

Density

(lb/gal) 9.5 Yield (ft3/sk) 2.52 Water (gal/sk)

0.078 cuft/ft OH 40 % excess 0.0886 cuft/ft csg ann