Form 3160-5 August 1999)

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. NMSF080244

6. If Indian, Allottee or Tribe Name

		,				
SUBMIT IN TRIF	PLICATE - Other instruc	tions on reve	rse side.		7. If Unit or CA/Agreen	nent, Name and/or No.
1. Type of Well				1 2	8. Well Name and No.	
Oil Well 🛛 Gas Well 🔲 Oth	er .	اليور	A'A' a		RIDDLE 2B	
Name of Operator BP AMERICA PRODUCTION		MARY CORLE E-Mail: corleym			9. API Well No. 30-045-31949-00)-X1
3a. Address P. O. BOX 3092		Ph: 281.366		le) 🤾	10. Field and Pool, or E BLANCO MESA\	
HOUSTON, TX 77253		Fx: 281.366.	0700	i cy/		
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description)			11. County or Parish, as	nd State
Sec 17 T30N R9W NESW 167	70FSL 2540FWL				SAN JUAN COU	NTY, NM
12. CHECK APPR	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF	NOTICE, R	EPORT, OR OTHER	DATA
TYPE OF SUBMISSION			ТҮРЕ	OF ACTION		
27	Acidize	☐ Deep	en	□ Product	ion (Start/Resume)	Water Shut-Off
Notice of Intent	☐ Alter Casing	_	ure Treat	☐ Reclam		☐ Well Integrity
☐ Subsequent Report	Casing Repair	_	Construction	☐ Recomp		Other
☐ Final Abandonment Notice	Change Plans	_	and Abandon	_	arily Abandon	Change to Original A
T mai Abandonment Notice	Convert to Injection	*****		☐ Water I		PD
13. Describe Proposed or Completed Ope	_	□ Plug				
Original APD submitted on 10, BP America submits for your a subject well as per the attached	approval amendements to			nting program	for the	
					NDITIONS OF A	
14. I hereby certify that the foregoing is	true and correct. Electronic Submission # For BP AMERICA nitted to AFMSS for proces	N PRODUCTION	l CO, sent to t	the Farmington	n	
Name (Printed/Typed) MARY CO	•	g 2) /\Di\\\\			PRESENTATIVE	
Signature (Electronic S	Submission)		Date 01/14	/2004		
	THIS SPACE FO	R FEDERA	L OR STATE	OFFICE U	SE	
Approved By Original Signed:	Stephen Mason]	Title			DJAN 2 2 2004
Conditions of approval, if any, are attache certify that the applicant holds legal or equ which would entitle the applicant to conditions.	uitable title to those rights in the uct operations thereon.	e 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 a statements or representations as	crime for any pe to any matter wi	rson knowingly a thin its jurisdicti	and willfully to n	nake to any department or	agency of the United

BP AMERICA PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM

Prospect Name: Riddle

Lease: Riddle

Well No: 2 B

Surface Location: 17-30N-9W, 1670 FSL, 2540 FWL

	Riddle		Su	rface Location:	17 0011	J., .J.	o . o . ,	10 1 WE
	San Juan							
	New Mexico			Field:	Blanco	Mesaver	de	
	January 7, 2							
OBJECTIVE: Drill 400)' below the top	of the Point Lo	okout Sandstone, se	2 7/8" production lo	ngstring, Stin	nulate CH,	MF and PL in	itervals
M	ETHOD OF	DRILLING		APPROXIMA	ATE DEPT	HS OF C	SEOLOGIC	CAL MARKER
TYPE OF TOOLS	ı	DEPTH OF	DRILLING	Estimated	GL: 610	0'	Estimated	KB: 6114'
Rotary	. (0 - TD		MARKER		SI	JBSEA	TVD
	LOG PRO	GRAM		Ojo Alamo			4521	1593
TYPE	I	DEPTH INVE	RAL	Kirtland			4467	1647
OPEN HOLE				Fruitland		1	3930	2184
None				Fruitland Coal			3555	2559
				Pictured Cliffs	"		3305 3088	2809
CASED HOLE				Lewis Cliff House	#		3000 1797	3026 4317
GR-CCL	-	TD to 5 1/2" s	hoe	Menefee	"#		1470	4644
0.1.002				Point Lookout			1057	5057
				Mancos			701	5413
REMARKS:					Ì	1		
 Please report any flar 	es (magnitud	e & duration).						
				TOTAL DEDT	<u>.</u>	_	657	F 4 5 7
				# Probable co		onval	* Possib	5457
	SPECIAL	TECTO		DRILL CUT				LLING TIME
TYPE	SPECIAL	15313		FREQUENC			FREQUE	
None				None		tion hole	Geolograp	
REMARKS:				TAOTIC			Occiograp	V-1D
INLIVIATIO.								
Approx. Interval		Type Mud	#/gal	Vis, sec/qt	W/L cc	's/30 mi	n Other	Specification
MUD PROGRAM: Approx. Interval 0 - 120 - 2509	200	Spud Water/LSN	#/gal 8.6-9.2 ID 8.6-9.2		<6	_		
Approx. Interval 0 - 120 - 2509 2509 - 5457		Spud	#/gal 8.6-9.2 ID 8.6-9.2	Vis, sec/qt	<6	_		
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS:	(1)	Spud Water/LSN Gas/Air/N2	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume	sufficient to main	<6 ntain a stab	ole and c	lean wellbo	ore
Approx. Interval 0 - 120 - 2509 2509 - 5457	(1)	Spud Water/LSN Gas/Air/N2	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume	sufficient to main	<6 ntain a stab	ole and c	lean wellbo	ore
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ	(1) uire sweeps	Spud Water/LSN Gas/Air/N2 to keep unlo	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume	sufficient to main	<6 ntain a stab	ole and c	lean wellbo	ore uency.
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ	(1) uire sweeps to the control of t	Spud Water/LSN Gas/Air/N2 to keep unlo	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh	sufficient to main water drilling. L	<6 ntain a state et hole cor	ole and conditions of	lean wellbo	uency. y Contract)
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String	(1) uire sweeps to the control of t	Spud Water/LSN Gas/Air/N2 to keep unlo	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specification Size	sufficient to main water drilling. L es casing sizes to be	<6 ntain a state et hole cor used. Hole Weight	ole and conditions of sizes will b	lean wellbo	uency. y Contract)
Approx. Interval 0 - 120 - 2509 120 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor	(1) uire sweeps to the control of t	Spud Water/LSN Gas/Air/N2 to keep unlo	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8"	sufficient to main water drilling. L es casing sizes to be Grade X-42 ST&C	<6 ntain a stab et hole cor used. Hole Weight 20#	ole and conditions of sizes will be Hole S	lean wellbo	uency. y Contract)
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor Intermediate 1	(1) uire sweeps to the control of t	Spud Water/LSN Gas/Air/N2 to keep unlo	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8" 5 1/2"	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C	<6 ntain a stab et hole cor used. Hole Weight 20# 15.5#	ole and conditions of sizes will be Hole S	lean wellbo	uency. y Contract)
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Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement	(1) uire sweeps to Stima Estima t to Surface	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods at ted Depth 200420 2509 5457	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8" 5 1/2"	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C	<6 ntain a stab et hole cor used. Hole Weight 20# 15.5#	ole and conditions of sizes will be Hole S	lean wellbo	uency. y Contract)
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor Intermediate 1 Production REMARKS:	(1) uire sweeps to Strima Estima t to Surface nove Fruitland	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods ai ted Depth 200420 2509 5457	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8" 5 1/2"	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C	<6 ntain a stab et hole cor used. Hole Weight 20# 15.5#	ole and conditions of sizes will be Hole S	lean wellbo	uency. y Contract)
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement (2) Set casing 50' ab	(1) uire sweeps to Strima Estima t to Surface nove Fruitland	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods ai ted Depth 200420 2509 5457	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8" 5 1/2"	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C	<6 ntain a stab et hole cor used. Hole Weight 20# 15.5#	ole and conditions of sizes will be Hole S	lean wellbo	ore uency.
Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement (2) Set casing 50' ab (3) Bring cement 100	(1) ire sweeps to stima Estima t to Surface ove Fruitland or above 5 1/	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods ai ted Depth 200420 2509 5457	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8" 5 1/2"	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C	<6 ntain a stab et hole cor used. Hole Weight 20# 15.5#	ole and conditions of sizes will be Hole S	lean wellbo	uency. y Contract)
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Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will required to the composition of the	(1) ire sweeps file (Normally, to Estima t to Surface pove Fruitland) above 5 1/ ire sweeps file (Normally, to Estima).	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods at ted Depth 200420 2509 5457 d Coal 2" shoe	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8" 5 1/2" 2 7/8"	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C	<6 ntain a stab et hole cor used. Hole Weight 20# 15.5#	ole and conditions of sizes will be Hole S	lean wellbo	uency. y Contract)
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Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will required to the control of the control	(1) lire sweeps file (Normally, to Estima t to Surface ove Fruitland by above 5 1/ lire (GRAM: imited Entry) KS:	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods at ted Depth 200420 2509 5457 d Coal 2" shoe	#/gal 8.6-9.2 ID 8.6-9.2 2/Mist Volume raded while fresh llocation letter specific Casing Size 8 5/8" 5 1/2" 2 7/8"	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C J-55	<6 ntain a stab et hole cor used. Hole Weight 20# 15.5# 6.5#	ole and conditions of sizes will be Hole S	lean wellbo	uency. y Contract)
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Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement (2) Set casing 50' ab (3) Bring cement 100 (4) 100' Overlap CORING PROGRAM None COMPLETION PRO Rigless, 3-4 Stage Li GENERAL REMARI Notify BLM/NMOCD Form 46 Reviewed b	(1) lire sweeps for the sweeps for the surface sove Fruitland; above 5 1/ GRAM: imited Entry KS: 24 hours pri	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods at ted Depth 200420 2509 5457 d Coal 2" shoe	#/gal 8.6-9.2 ID 8.6-9.2 ID 8.6-9.2 Id Volume Idea of the second of the	water drilling. Less casing sizes to be Grade X-42 ST&C J -55 ST&C J-55	<6 et hole cor used. Hole Weight 15.5# 6.5# menting.	nditions of sizes will be Hole S 7.8	lean wellbo	uency. y Contract)
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Approx. Interval 0 - 120 - 2509 2509 - 5457 REMARKS: (1) The hole will requ CASING PROGRAM Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement (2) Set casing 50' ab (3) Bring cement 100 (4) 100' Overlap CORING PROGRAM None COMPLETION PRO Rigless, 3-4 Stage Li GENERAL REMARI Notify BLM/NMOCD Form 46 Reviewed b	ire sweeps for the sw	Spud Water/LSN Gas/Air/N2 to keep unlo ubular goods ai ted Depth 200420 2509 5457 d Coal 2" shoe Hydraulic F or to Spud,	#/gal 8.6-9.2 ID 8.6-9.2 ID 8.6-9.2 Id Volume Id Volume Id I	sufficient to main water drilling. L es casing sizes to be Grade X-42 ST&C J -55 ST&C J-55 Casing and Cer ging program re	<6 et hole cor used. Hole Weight 15.5# 6.5# menting. viewed by 7, 2003	nditions of sizes will be Hole S 7.8	lean wellbo	uency. y Contract)

BP America Production Company BOP Pressure Testing Requirements

Well Name: Riddle

County: San Juan

2 B

State: New Mexico

Formation	Estimated TVD/MD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1593		
Fruitland Coal	2559		
PC	2809		
Lewis Shale	3026		
Cliff House	4317	500	0
Menefee Shale	4644		
Point Lookout	5057	600	0
Mancos	5413		
Dakota	-		

** Note: Determined using the following formula: ABHP - (.22*TVD) = ASP

Requested BOP Pressure Test Exception: 750 psi

Cementing Program

Well Name: Location: County: State:	Riddle 2B 17-30N-09W, 16 San Juan New Mexico	670 FSL, 2540 FV	V L		Field: API No. Well Flac Formation: KB Elev (e GL Elev. (e	st)					
					OL LIEV. (
Casing Program			\! O!	Th	T00	_	O4 TI		•		
Casing String	Est. Depth (ft.)	_	asing Size n.)	Thread	TOC (ft.)		Stage Tool Or TOL (ft.				
Surface	-120 20		8 5/8	ST&C	Surface		NA	,			
Intermediate	2509	7 7/8	5 1/2	ST&C	Surface		NA				
Production -	5457	4 3/4	2 7/8		2409		NA				
Casing Proper	ties:	(No Safety Fac	tor Included)								
Casing String	Size	Weight C	Grade	Burst	Collapse		Joint St.		Capacity	Drift	
	(in.)	(lb/ft)		(psi.)	(psi.)		(1000 lbs.)		(bbl/ft.)	(in.)	
Surface	8 5/			2950		1370		244			7.972
Intermediate	5 1/			4810		4040		202			5.067
Production -	. 27	/8 6.5 J	-55	7264	1	7676		72	0.00579		2.375
Mud Program											
Apx. Interval	Mud Type	Mud Weight		Recomm	ended Mud	Proper	ties Prio Ce	men	<u>tíng:</u>		
(ft.)											
0 - SCP	Water/Spud	8.6-9.2		Fluid Los	is <6						
SCP - ICP	Water/LSND	8.6-9.2									
ICP - TD	Gas/Air Mist	NA_									
Cementing Prog	aram:								·=		
	,····		Surface		Intermed	diate			Production		
Excess %, Lead	i		100		100	1			40		
Excess %, Tail			NA		0				40		
BHST (est deg.	•		72		110)			159		
Time Between Stages, (hr)		NA	NA			NA					
Special Instructi			1,6		1,6				2,6		
		pumps and lines.									
	2. Wash pumps	and lines.									
	3. Reverse out										
	4. Run Blend To			بام:4							
		Pressure, and De	•								
		sitometer with pres surface if cement									
	r. i cement to	surface if cement	is not circulat	eu.							

Surface:					
	Preflush	20 bbl.	FreshWater		
	Slurry 1	90 sx Clas	ss G Cement		95 cuft
	TOC@Surface	+ 3% (CaCl2 (accelerator)		
		0.25 #/	sk Cellophane Flake (lost circ	culation additive)	0.3961 cuft/ft OH
		0.1%	046 antifoam		100 % excess
Slurry Properties	:	Density	Yield	Water	
		(lb/gal)	(ft3/sk)	(gal/sk)	
	Siurry 1	15.8	1.16	4.95	;

8. If cement is not circulated to surface, run temp. survey 10-12 hr. after landing plug.

Cementing Program

Intermediate:					
	Fresh Water	20 bbl	fresh water		
			070 01 #0# 0		070#
	Lead		270 sx Class "G" Cer + 3% D79 extend		679 cuft
	Slurry 1 TOC@Surface		+ 3% D/9 extend +1/4 #/sk. Cellop		
	TOC@Surface		+ 0.1% D46 antif		
			70 sx 50/50 Class "		
	Tail		+ 2% gel (extend		87 cuft
	Slurry 2		0.1% D46 antifo	•	5. 5 <u>5</u>
	500 ft fill		+1/4 #/sk. Cellop		0.1733 cuft/ft OH
			+ 2% S1 Calciun		0.2009 cuft/ft csg ann
					80 % excess
Slurry Properties:	Den	sity	Yield	Water	
	(lb/g	jai)	(ft3/sk)	(gal/sk)	
Slurry 1		11.7	2.61	17.77	
Slurry 2		13.5	1.27	5.72	
Production:		:			-
i roddolloll.	Fresh Water	10 bbl	CW100		
	Slurry		140 LiteCrete D961 /	D124 / D154	
			+ 0.03 gps D47	antifoam	334 cuft
			+ 0.5% D112 flui	d loss	
	TOC@Liner Top		+ 0.11% D65 T10		
					0.078 cuft/ft OH
Slurry Properties:	Den	sity	Yield	Water	40 % excess
• • •	(lb/g	•	(ft3/sk)	(gal/sk)	0.0886 cuft/ft csg anr
Slurry	` `	9.5	2.52	6.38	9

BLM CONDITIONS OF APPROVAL

Operator: BP America Production Company

Well Name: Riddle 2B

Legal Location: 1670' FSL, 2540' FWL; sec. 17, T30N, R9W

Lease No.: NMSF 080244

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.