Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMSF077123

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
WARREN LS 2C

2. Name of Operator
BP AMERICA PRODUCTION CO
Contact: CHERRY HLAVA
E-Mail: HlavaCL@bp.com

9. API Well No.
30-045-32177-00-X1

3a. Address
200 ENERGY CT
FARMINGTON, NM 87402

3b. Phone No. (include area code)
Ph: 281.366.4081

10. Field and Pool, or Exploratory
BLANCO MESAVERDE

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 12 T28N R9W NESW Lot M 655FSL 985FWL
36.40300 N Lat, 107.44700 W Lon

11. County or Parish, and State
SAN JUAN COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original A PD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The original APD was submitted on 02/16/04 and approved 08/09/04. We respectfully request permission to change the original drilling plan from a slim hole to a conventional wellbore. Please see the attached revised drilling plan and cement program.

There is no change to the total depth or well location.

NOV 2004
RECEIVED
OIL CONS. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #50967 verified by the BLM Well Information System
For BP AMERICA PRODUCTION CO, sent to the Farmington
Committed to AFMSS for processing by ADRIENNE BRUMLEY on 11/16/2004 (05AXB0272SE)

Name *(Printed/Typed)* CHERRY HLAVA — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 11/15/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By — Title Petr. Eng — Date 11/18/04

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

NMOCD

BP AMERICA PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM

Prospect Name: Warren LS
Lease: Warren
County: San Juan
State: New Mexico
Date: November 11, 2004

Well No: 2 C
Surface Location: 12-28N-9W; 665 FSL, 985 FWL
Field: Blanco Mesaverde

OBJECTIVE: Drill 400' below the top of the Point Lookout Sandstone, set 4-1/2" production liner, Stimulate CH, MF and PL intervals

METHOD OF DRILLING

TYPE OF TOOLS	DEPTH OF DRILLING
Rotary	0 - TD

LOG PROGRAM

TYPE	DEPTH INVERAL
OPEN HOLE	
None	
CASED HOLE	
GR-CCL-TDT	TD to 7" shoe

REMARKS:
- Please report any flares (magnitude & duration).

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Estimated GL: 5824 Estimated KB: 5838

MARKER		SUBSEA	TVD
Ojo Alamo		4566	1272
Kirtland		4512	1326
Fruitland		4116	1722
Fruitland Coal	*	3842	1996
Pictured Cliffs	*	3622	2216
Lewis	*	3460	2379
Cliff House	#	2212	3626
Menefee	#	1891	3947
Point Lookout	#	1375	4463
Mancos		1007	4831
TOTAL DEPTH		975	4863

Probable completion interval * Possible Pay

SPECIAL TESTS

TYPE
None

REMARKS:

DRILL CUTTING SAMPLES		DRILLING TIME	
FREQUENCY	DEPTH	FREQUENCY	DEPTH
None	Production hole	Geograph	0-TD

MUD PROGRAM:

Approx. Interval			Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification
0	- 120		Spud	8.6-9.2			
120	- 1946	(1)	Water/LSND	8.6-9.2		<6	
1946	- 4863		Gas/Air/N2/Mist	Volume sufficient to maintain a stable and clean 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 allocation letter specifies casing sizes to be used. Hole sizes will be governed by Contract)

Casing String	Estimated Depth	Casing Size	Grade	Weight	Hole Size	Landing Pt, Cmt, Etc.
Surface/Conductor	120	9 5/8"	H-40 ST&C	32#	12.25"	1
Intermediate 1	1946	7"	J -55 ST&C	20#	8.75"	1,2
Production	4863	4-1/2"	J-55	10.5#	6.25"	3,4

REMARKS:
(1) Circulate Cement to Surface
(2) Set casing 50' above Fruitland Coal
(3) Bring cement 100' above 7" shoe
(4) 100' Overlap

CORING PROGRAM:
None

COMPLETION PROGRAM:
Rigless, 2-Stage Limited Entry Hydraulic Frac

GENERAL REMARKS:
Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.

Form 46 Reviewed by: Logging program reviewed by: N/A

PREPARED BY:	APPROVED:	DATE:	
HGJ/JLP/JMP		November 11, 2004 Version 3.0	

Form 46 12-00 MNP

BP America Production Company
BOP Pressure Testing Requirements

Well Name: Warren LS 2 C
County: San Juan **State:** New Mexico

Formation	Estimated TVD/MD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1272		
Fruitland Coal	1996		
PC	2216		
Lewis Shale	2379		
Cliff House	3626	500	0
Menefee Shale	3947		
Point Lookout	4463	600	0
Mancos	4831		

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

Requested BOP Pressure Test Exception: 750 psi

Cementing Program

REVISED 11/15/04

Well Name:	Warren LS 2C	Field:	Blanco Mesaverde
Location:	12-28N-09W, 665 FSL, 985 FWL	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	MesaVerde
		KB Elev (est)	5838
		GL Elev. (est)	5824

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)
Surface	120	12.25	9.625	ST&C	Surface	NA
Intermediate	1946	8.75	7	LT&C	Surface	NA
Production -	4863	6.25	4.5		1846	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	8.845
Intermediate	7	20	K-55	3740	2270	234	0.0405	6.456
Production -	4.5	11.6	J-55	5350	4960	154	0.0155	3.875

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight
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

Recommended Mud Properties Prio Cementing:

PV	<20
YP	<10
Fluid Loss	<15

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	59 sx Class C Cement		75 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)		
			0.3132 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
Centralizers, as needed
1 Stop Ring
1 Thread Lock Compound

Intermediate:

Fresh Water	20 bbl	fresh water

Cementing Program

Lead		161	sx Class "G" Cement	420 cuft
Slurry 1			+ 3% D79 extender	
TOC@Surface			+1/4 #/sk. Cellophane Flake	
			+ 0.1% D46 antifoam'	
		59	sx 50/50 Class "G"/Poz	
Tail			+ 2% gel (extender)	75 cuft
Slurry 2			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 (lb/gal)	Yield (ft3/sk)	Water (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		173	LiteCrete D961 / D124 / D154	
			+ 0.03 gps D47 antifoam	435 cuft
			+ 0.5% D112 fluid loss	
TOC@Liner Top			+ 0.11% D65 TIC	
				0.1026 cuft/ft OH
				40 % excess
				0.1169 cuft/ft csg ann

Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry	9.5	2.52	6.38

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

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