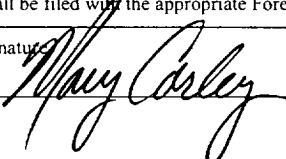


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078319-A
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well Gas <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 Attn: Mary Corley		7. If Unit or CA Agreement, Name and No
3a. Address P.O. Box 3092 Houston, Texas 77253	3b. Phone No. (include area code) 281-366-4491	8. Lease Name and Well No. B Riddle C LS 2B
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 2390' FNL & 1715' FEL At proposed prod. Zone		9. API Well No. 30-045-31078
10. Field and Pool, or Exploratory Blanco Mesaverde		11. Sec., T., R., M., or Blk, and survey or Area G Sec. 30, T31N, R09W
14. Distance in miles and direction from nearest town or post office*		12. County or Parish San Juan
15. Distance from proposed* Location to nearest Property or lease line, ft. (Also to nearest drig. Unit line, if any) 1715'		13. State New Mexico
16. No. of Acres in lease 316.04		17. Spacing Unit dedicated to this well 316.04 E/2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1900'		20. BLM/BIA Bond No. on file WY2924
19. Proposed Depth 5848'		21. Elevations (show whether DF, KDB., RT, GL, etc.) 6431' GL
22. Approximate date work will start* May 15, 2002		23. Estimated duration 7 Days
24. Attachments DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED GENERAL REQUIREMENTS.		
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. 2. A Drilling Plan. 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). 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be required by the authorized officer.		
25. Signature 	Name (Printed/typed) Mary Corley	Date 04/17/2002
Title Senior Regulatory Analyst		
Approved by (Signature) /s/ Mark Kelly	Name (Printed/Typed) Assistant Field Manager (Minerals)	Date MAY 24
Office ACTING		

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.

*(Instructions on reverse)

070 PCH/INSTRUC, NM
2002 APR 18 PM 12:22
INDEXED

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

¹ API Number 30-045-31078		² Pool Code 72319		³ Pool Name Blanco Mesa Verde	
⁴ Property Code 000976		⁵ Property Name Riddle C LS			⁶ Well Number # 2B
⁷ OGRID No. 000778		⁸ Operator Name BP AMERICA PRODUCTION COMPANY			⁹ Elevation 6431

¹⁰ Surface Location

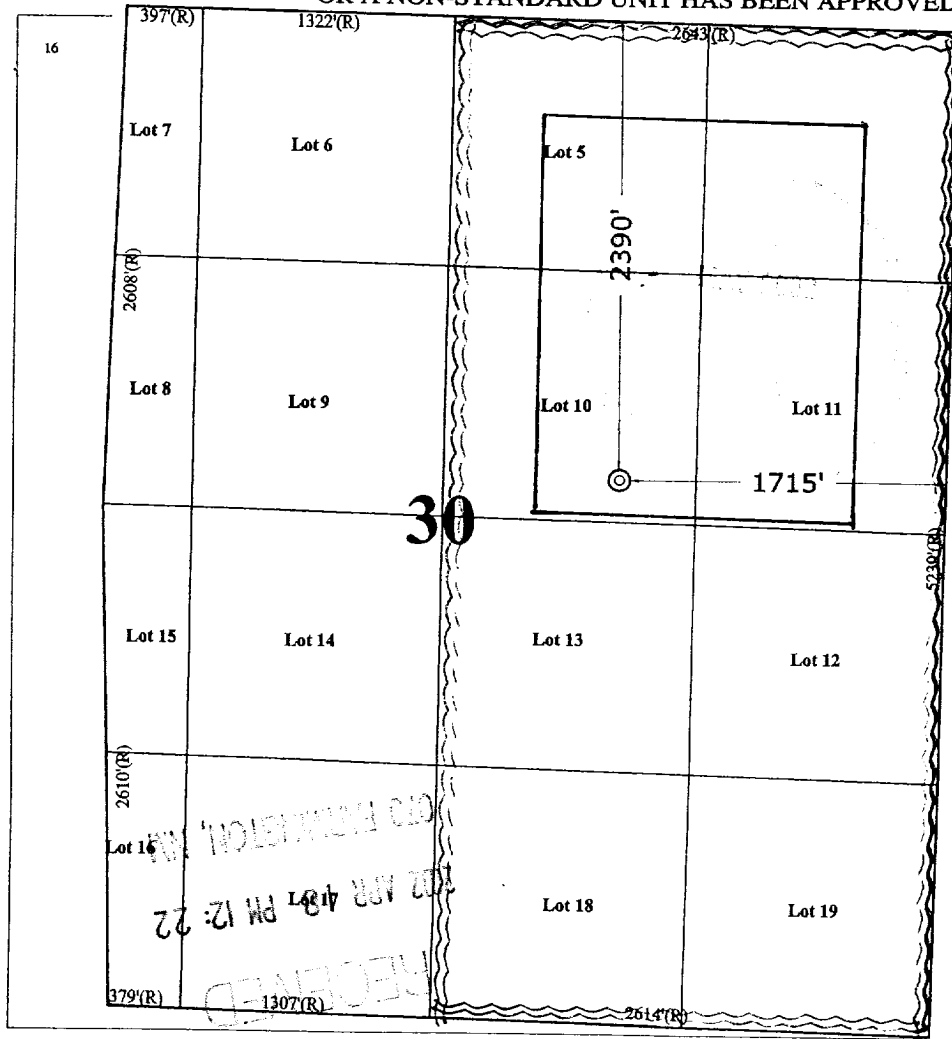
UL or Lot No. G (Lot 10)	Section 30	Township 31 N	Range 9 W	Lot Idn	Feet from the 2390	North/South line NORTH	Feet from the 1715	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

¹ 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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¹² Dedicated Acres 316.04	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Mary Corley*
Printed Name: Mary Corley
Title: Sr. Regulatory Analyst
Date: 04-17-2002

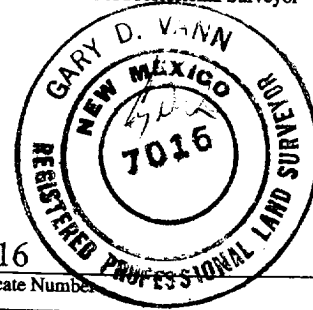
¹⁸ SURVEYOR CERTIFICATION

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.

March 18, 2002

Date of Survey

Signature and Seal of Professional Surveyor



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

Prospect Name: Riddle C LS
Lease: Riddle C LS
County: San Juan
State: New Mexico
Date: April 17, 2002

Well No: 2B
Surface Location: 30-31N-9W, 2390 FNL, 1715 FEL
Field: Blanco Mesaverde
Bottom Location:

OBJECTIVE: Drill 50' below the base of the Mancos Shale, set 4 1/2" production liner, Stimulate LS, CH, MF and PL intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER					
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 6431		Estimated KB: 6445			
Rotary	0 - TD	MARKER		TVD	SUBSEA		
LOG PROGRAM		Ojo Alamo		1822	4623		
		Kirkland		1968	4477		
		Fruitland		2695	3750		
		Fruitland Coal	*	2948	3497		
		Pictured Cliffs	*	3234	3211		
		Lewis Shale	#	3376	3069		
		Cliff House	#	4910	1535		
		Menefee Shale	#	5052	1393		
		Point Lookout	#	5439	1006		
		Mancos		5798	647		
		REMARKS: - Please report any flares (magnitude & duration).		TOTAL DEPTH		5848	597
				# Probable completion interval		* Possible Pay	
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME			
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH		
None		none	Production hole	Geolograph	0-TD		
REMARKS:							

MUD PROGRAM:					
Approx. Interval	Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120	Spud	8.6-9.2			
120 - 2898 (1)	Water/LSND	8.6-9.2		<6	
2898 - 5848	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	2898	7"	J/K-55 ST&C	20#	8.75"	1,2
Production Liner	5848	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, 3-4 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/MNP		11 th April 2002	
		Version 1.0	

Cementing Program

Well Name: Riddle C LS 2B Location: 30-31N-9W, 2390 FNL, 1715 FEL County: San Juan State: New Mexico	Field: Blanco Mesaverde API No. Well Flac Formation: MesaVerde KB Elev (est) 6445 GL Elev. (est) 6431
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Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)	Cmt Cir. Out (bbl.)
Surface	120	12.25	9.625	ST&C	Surface	NA	
Intermediate	2898	8.75	7	LT&C	Surface	NA	
Production -	5848	6.25	4.5		2798	NA	

Casing Properties:

(No Safety Factor Included)								
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	3370	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	Recommended Mud Properties Prio Cementing:
			PV <20
			YP <10
			Fluid Los: <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
7. 1" cement to surface if cement is not circulated.
8. If cement is not circulated to surface, run temp. survey 10-12 hr. after landing plug.

Notes:

*Do not wash up on top of plug. Wash lines before displacing production cement job to minimize drillout.

Surface:

Preflush	20 bbl.	FreshWater	
Slurry 1	70 sx Class G Cement		75 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)		
	0.25 #/sk Cellophane Flake (lost circulation additive)		0.3132 cuft/ft OH
	0.1% D46 antifoam		100 % excess
Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	15.8	1.16	4.95

Casing Equipment:

9-5/8", 8R, ST&C
 1 Guide Shoe
 1 Top Wooden Plug
 1 Autofill insert float valve
 Centralizers, 1 per joint except top joint

Cementing Program

1 Stop Ring
1 Thread Lock Compound

Intermediate:

Fresh Water	20 bbl	fresh water	
Lead	280 sx Class "G" Cement		706 cuft
Slurry 1	+ 3% D79 extender		
TOC@Surface	+1/4 #/sk. Cellophane Flake		
	+ 0.1% D46 antifoam'		
Tail	60 sx 50/50 Class "G"/Poz		
Slurry 2	+ 2% gel (extender)		75 cuft
	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, one every other joint to base of Ojo
2 Turbolizers across Ojo
Centralizers, one every 4th joint from Ojo to base of surface casing
1 Top Rubber Plug
1 Thread Lock Compound

Production:

Fresh Water	10 bbl	CW100	
Slurry	180 LiteCrete D961 / D124 / D154		440 cuft
	+ 0.03 gps D47 antifoam		
	+ 0.5% D112 fluid loss		
TOC@100' into 7"	+ 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 (autofill with minimal LCM in mud)
1 Float Collar (autofill with minimal LCM in mud)
1 Stop Ring
Centralizers, every 4th joint in mud drilled holes, none in air drilled holes
1 Top Rubber Plug
1 Thread Lock Compound

FEDERAL CEMENTING REQUIREMENTS

1. 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 impart a swirling action around the casing and 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.

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 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. No abnormal temperature, pressure, or Hydrogen Sulfide gas is anticipated.

Equipment Specification

Interval

BOP Equipment

Below conductor casing to total depth	11" nominal or 7 1/16", 3000 PSI double ram preventer with rotating head.
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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, upper Kelly cock with a handle available, floor safety valves and choke manifold which will also be tested to equivalent pressure at the appropriate intervals