

RECEIVED

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

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

2003 SEP 12 AM 10:21

070 Farmington, NM

6. Lease Serial No. SF - 08097 080597

6. If Indian, Allottee or tribe Name

7. If Unit or CA Agreement, Name and No

8. Lease Name and Well No.

Lorraine Gas Com 1M

9. API Well No.

30-045-31891

10. Field and Pool, or Exploratory

Basin Dakota & Blanco Mesaverde

11. Sec., T., R., M., or Blk. and survey or Area

K Sec. 26, T30N, R08W

12. County or Parish

San Juan

13. State

New Mexico

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well Gas ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator

BP America Production Company Attn: Mary Corley

3a. Address

P.O. Box 3092 Houston, Texas 77253

3b. Phone No. (include area code)

281-366-4491

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 2415' FSL & 1880' FWL

At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office*

23 miles from Bloomfield, NM

15. Distance from proposed*
Location to nearest
Property or lease line, ft.

(Also to nearest drig. Ujnit line, if any) 760

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

320 w/r

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

1200'

19. Proposed Depth

7274'

20. BLM/BIA Bond No. on file

WY2924

21. Elevations (show whether DF, KDB., RT, GL, etc.

5901' GL

22. Approximate date work will start*

November 5, 2003

23. Estimated duration

7 Days

24. Attachments

The 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 System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Mary Corley

Name (Printed/typed)

Mary Corley

Date

09/11/2003

Title

Senior Regulatory Analyst

Approved by (Signature)

DM

Name (Printed/Typed)

Date

10-20-03

Title

Office

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)

DRILLING 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

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 30-045-31891	² Pool Code 71599-72319	³ Pool Name BASIN DAKOTA & BLANCO MESA VERDE
⁴ Property Code 13200	⁵ Property Name Lorraine Gas Com	⁶ Well Number # 1M
⁷ OGRID No. 000778	⁸ Operator Name BP AMERICA PRODUCTION COMPANY	⁹ Elevation 5901

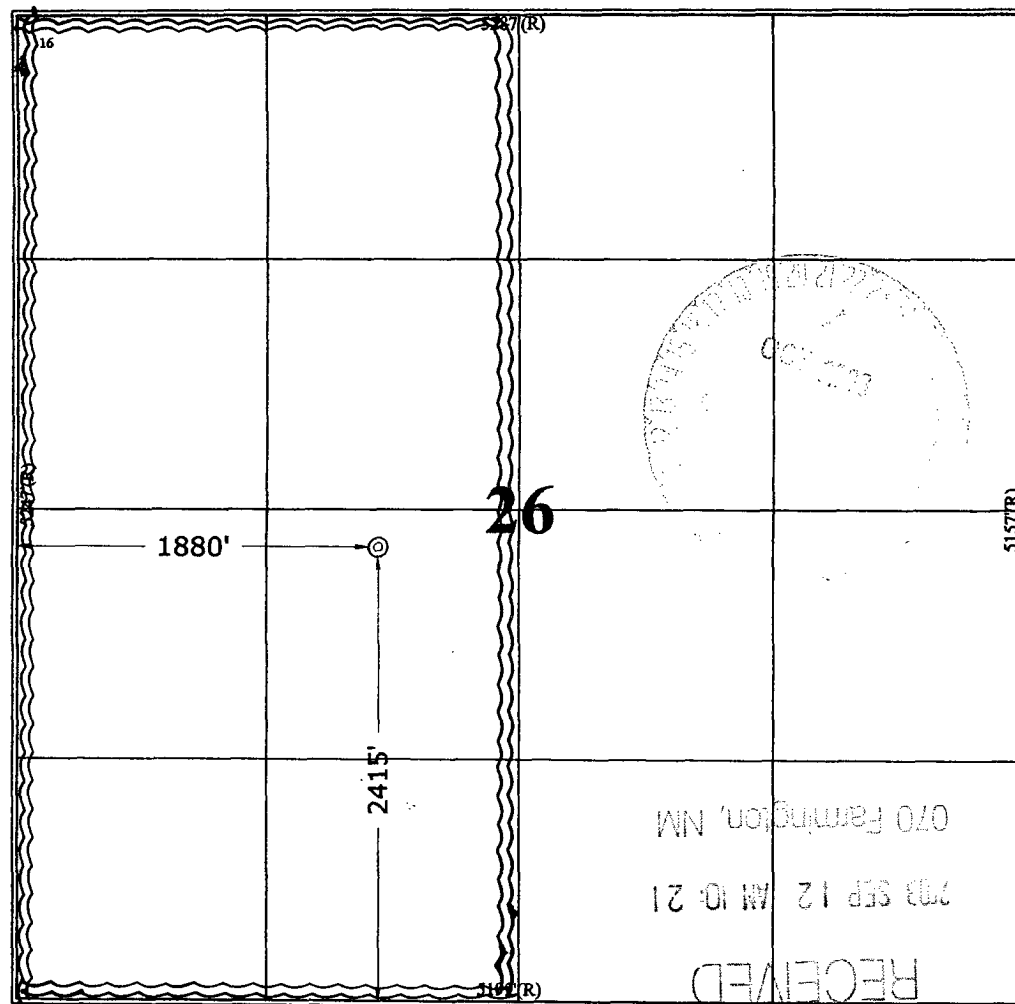
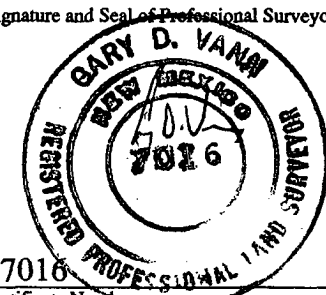
¹⁰ Surface Location

UL or Lot No. K	Section 26	Township 30 N	Range 8 W	Lot Idn	Feet from the 2415	North/South line SOUTH	Feet from the 1880	East/West line WEST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

⁷ UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Mary Corley</i> Signature Mary Corley Printed Name Regulatory Analyst Title 09.11.2003 Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>August 18, 2003 Date of Survey</p> <p>GARY D. VANN Signature and Seal of Professional Surveyor</p> <p> 7016 Certificate Number</p>

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.

RECEIVED

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

2003 SEP 22 AM 11:49

SF - 080957

070 Fairington, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. SF - 080957
2. Name of Operator BP America Production Company Attn: Mary Corley		6. If Indian, Allottee or tribe Name
3a. Address P.O. Box 3092 Houston, TX 77253	3b. Phone No. (include area code) 281-366-4491	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2415' FSL & 1880' FEL Sec. 26 T30N, R08W		8. Well Name and No. Lorraine Gas Com 1M
		9. API Well No. 30045 31891
		10. Field and Pool, or Exploratory Area Basin Dakota/Blanco Mesaverde
		11. County or Parish, State San Juan County, New Mexico

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

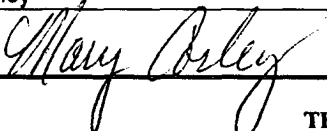
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water shut-Off
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Reclamation
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Other _____
			<input type="checkbox"/> 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 recompleate 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 recompleation 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.

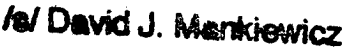
APD Filed on 09/11/2003

Please note the following change in the surface casing setting depth for the subject well:

Change Casing setting depth from 120' to 280' and;
Cement from 110 SXS to 240 SXS

14. I hereby certify that the foregoing is true and correct Name (Printed/typed) Mary Corley		Title Senior Regulatory Analyst
Signature 		Date 09/18/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by 	Title Date OCT 20 2003
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.

NMOC

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

Prospect Name: Lorraine Gas Com
Lease: Lorraine Gas Com
County: San Juan
State: New Mexico
Date: September 2, 2003

Well No: 1M
Surface Location: 26-30N-8W, 2415 FSL, 1880 FWL
Field: Blanco Mesaverde/Basin Dakota

OBJECTIVE: Drill 260' below the top of the Upper Two Wells (DKOT), set 4 1/2" production casing, Stimulate CH, MF, PL and DK intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 5901		Estimated KB: 5915	
Rotary	0 - TD				
LOG PROGRAM		MARKER		SUBSEA	TVD.
TYPE	DEPTH INVERAL	Ojo Alamo		4224'	1691'
<u>OPEN HOLE</u>		Kirkland		4145'	1770'
none		Fruitland		3703'	2212'
		Fruitland Coal	*	3469'	2446'
		Pictured Cliffs	*	3180'	2735'
		Lewis Shale	#	3025'	2890'
		Cliff House	#	1678'	4238'
<u>CASED HOLE</u>		Menefee Shale	#	1350'	4565'
GR-CCL-TDT	TDT - TD to 7" shoe	Point Lookout	#	953'	4963'
CBL	Identify 4 1/2" cement top	Mancos		596'	5319'
		Greenhorn		-988'	6903'
		Bentonite Marker		-1042'	6957'
		Two Wells	#	-1099'	7014'
		Paguate	#	-1201'	7116'
		Cubero Upper	#	-1227'	7142'
		Cubero Lower	#	-1253'	7168'
		TOTAL DEPTH		-1359'	7274'
		# Probable completion interval		* Possible Pay	
REMARKS:					
- Please report any flares (magnitude & duration).					
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH
None		10'	2990'-TD	Geolograph	0-TD
REMARKS:					

MUD PROGRAM:

Approx. Interval	Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120 280	Spud	8.6-9.2			
120 - 2990 (1)	Water/LSND	8.6-9.2		<6	
2990 - 7274	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	280' 120	9 5/8"	H-40 ST&C	32#	13.5"	1
Intermediate 1	2990	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	7274	4 1/2"	J-55	11.6#	6.25"	3

REMARKS:

- (1) Circulate Cement to Surface
- (2) Set casing 100' into Lewis Shale
- (3) Bring cement 100' above 7" shoe

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/JMP

September 2, 2003
Version 4.0

Form 46 12-00 MNP

BP America Production Company

BOP Pressure Testing Requirements

Well Name: Lorraine Gas Com
County: San Juan

1M
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1691		
Fruitland Coal	2446		
PC	2735		
Lewis Shale	2890		
Cliff House	4238	500	0
Menefee Shale	4565		
Point Lookout	4963	600	0
Mancos	5319		
Dakota	7014	2600	1057

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

Requested BOP Pressure Test Exception: 1500 psi

SAN JUAN BASIN
Dakota Formation
Pressure Control Equipment

Background

The objective Dakota 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 in the Basin Dakota. No abnormal temperature, pressure, or H2S 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.

All ram type preventers and related control equipment will be hydraulically tested to 250 psi (low pressure) and 2000 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.