

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

| | | | |
|--|--|--|--|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. SF - 078106 | |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <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 | | 7. If Unit or CA Agreement, Name and No. | |
| 3a. Address P.O. BOX 3092 HOUSTON, TX 77253 | | 8. Lease Name and Well No. GALLEGOS CANYON UNIT 584 | |
| 3b. Phone No. (include area code) Ph: 281.366.4081 Fx: 281.366.0700 | | 9. API Well No. 30045-31601 | |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENW Lot C 1005FNL 1450FWL 36.00000 N Lat, 108.00000 W Lon At proposed prod. zone | | 10. Field and Pool, or Exploratory KUTZ PICTURED CLIFFS, WEST | |
| 14. Distance in miles and direction from nearest town or post office* 16.2 MILES EAST FROM FARMINGTON, NM | | 11. Sec., T., R., M., or Blk. and Survey or Area Sec 18 T28N R12W Mer NMP | |
| 15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) | | 12. County or Parish SAN JUAN | |
| 16. No. of Acres in Lease 43102.00 | | 13. State NM | |
| 18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. | | 17. Spacing Unit dedicated to this well 151.87 NW/4 | |
| 19. Proposed Depth 1558 MD | | 20. BLM/BIA Bond No. on file | |
| 21. Elevations (Show whether DF, KB, RT, GL, etc.) 5582 GL | | 22. Approximate date work will start | |
| | | 23. Estimated duration | |

24. Attachments

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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

| | | |
|--|--------------------------------------|--------------------|
| 25. Signature (Electronic Submission) | Name (Printed/Typed) CHERRY HLAVA | Date 03/27/2003 |
| Title AUTHORIZED REPRESENTATIVE | | |
| Approved by (Signature) David J. Mankiewicz | Name (Printed/Typed) | Date |
| 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.

Additional Operator Remarks (see next page)

Electronic Submission #19672 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

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

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **

NMOC

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 30045-31601 | | ² Pool Code 79680 | ³ Pool Name West Kutz Pictured Cliffs |
| ⁴ Property Code 000570 | ⁵ Property Name Gallegos Canyon Unit | | ⁶ Well Number # 584 |
| ⁷ OGRID No. 000778 | ⁸ Operator Name BP AMERICA PRODUCTION COMPANY | | ⁹ Elevation 5582 |

¹⁰ Surface Location

| UL or Lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| C | 18 | 28 N | 12 W | | 1005 | NORTH | 1450 | WEST | SAN JUAN |

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 151.87 | 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

| | |
|-------------------|--|
| ¹⁶ | ¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <u>Cherry Hlava</u> Printed Name <u>Cherry Hlava</u> Title <u>Regulatory Analyst</u> Date <u>March 17, 2003</u> |
| | 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. <u>February 18, 2003</u> Date of Survey Signature and Seal of Professional Surveyor |
| | Certificate Number <u>7016</u> |
| | |

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

Prospect Name: GCU 584
Lease: GALLEGOS CANYON UNIT
County: San Juan
State: New Mexico
Date: March 26, 2003

Well No: 584
Surface Location: 1005' FNL & 1450' FWL
 Sec. 18, 28N-12W
Field: West Kutz Pictured Cliffs

OBJECTIVE: Drill 200' into the Pictured Cliffs, set 4 1/2" casing to TD, perf & stimulate Pictured Cliffs interval

| | | | | | |
|--|------------------------------|--|--------------|----------------------|------------------|
| METHOD OF DRILLING | | APPROXIMATE DEPTHS OF GEOLOGICAL MARKER | | | |
| TYPE OF TOOLS | DEPTH OF DRILLING | Estimated GL: 5582 | | Estimated KB: 5593 | |
| Rotary/Top Drive | 0 - TD | MARKER | | SUBSEA | MEAS DEPT |
| LOG PROGRAM | | Ojo Alamo | | 5560 | |
| TYPE | DEPTH INVERAL | Kirtland | | 5480 | |
| Open Hole (Platform Express) | TD to base of surface casing | Fruitland Coal | * | 4261 | 1 |
| | | Pictured Cliffs | # | 4235 | 1 |
| REMARKS: | | TOTAL DEPTH | | 4035 | 1 |
| - Please report any flares (magnitude & duration). | | # Completion interval | | * Possible Pay | |
| SPECIAL TESTS | | DRILL CUTTING SAMPLES | | DRILLING TIME | |
| TYPE | | FREQUENCY | DEPTH | FREQUENCY | DEPT |
| None | | None | | Geolograph | 0-TD |
| REMARKS: | | | | | |

| MUD PROGRAM: | | | | | |
|--------------------|------------|---------------|-------------|-----------------|---------------------|
| Approx. Interval | Type Mud | Weight, #/gal | Vis, sec/qt | W/L cc's/30 min | Other Specification |
| 0 - 120-135 3 jts. | Spud | 8.6-9.2 | | | |
| 120-135 - TD (1) | Water/LSND | 8.6-9.2 | | | |

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 Point, Cer Etc. |
|-------------------|-----------------|-------------|-----------|--------|-----------|-------------------------|
| Surface/Conductor | 120-135 | 7" | J 55 ST&C | 23# | 8.75" | 1 |
| Production | 1558 | 4 1/2" | J 55 ST&C | 10.5# | 6.25" | 1,2 |

REMARKS:

- (1) Circulate Cement to Surface
- (2) Set casing 200' below top of Pictured Cliffs

CORING PROGRAM:

None

COMPLETION PROGRAM:

Rigless, Single Stage 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: DLJ

PREPARED BY:

APPROVED:

DATE:

HGJ/JLP

Form 46

BP America Production Company BOP Pressure Testing Requirements

Well Name: GCU 584

584

County: San Juan

State: New Mexico

| Formation | TVD | Anticipated Bottom Hole Pressure | Maximum Anticipated Surface Pressure ** |
|----------------|------|-------------------------------------|--|
| Ojo Alamo | 33 | | |
| Kirtland | 113 | | |
| Fruitland Coal | 1332 | | |
| PC | 1358 | | |

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

Requested BOP Pressure Test Exception: 750 psi

SAN JUAN BASIN Pictured Cliffs Formation Pressure Control Equipment

Background

The objective Pictured Cliffs 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.

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.