Form 3160-3

FORM APPROVED

| UNITED S | | OMB No. 1004- Expires November | |
|---|---|--|--------------------|
| DEPARTMENT OF BUREAU OF LAND | | 5. Lease Serial No. SF - 078040 | |
| APPLICATION FOR PERMIT | TO DRILL OR REENTER | 6. If Indian, Allottee or Tribe N | lame |
| 1a. Type of Work: ☑ DRILL ☐ REENTER | | 7. If Unit or CA Agreement, No | ame and No. |
| lb. Type of Well: ☐ Oil Well ☐ Gas Well ☐ C | | 8. Lease Name and Well No. MUDGE GAS COM D 1M | |
| Name of Operator Contact BP AMERICA PRODUCTION COMPANY | t: MARY CORLEY E-Mail: corleyml@bp.com | 9. API Well No. 300453 | 1618 |
| 3a. Address P.O. BOX 3092 HOUSTON, TX 77253 | 3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700 | 10. Field and Pool, or Explorat BASIN DAKOTA/BLAN | ory |
| 4. Location of Well (Report location clearly and in according | dance with any State requirements.*) | 11. Sec., T., R., M., or Blk. and | Survey or Area |
| At surface NWSE Lot J 2485FSL 16 | 95FEL 36.54800 N Lat, 107.56300 | W Lon Sec 12 T31N R11W M | er NMP |
| At proposed prod. zone | 100 (A) | T J | |
| 14. Distance in miles and direction from nearest town or pos 8 MILES TO AZTEC, NEW MEXICO | ot office* | 12. County or Parish SAN JUAN | 13. State NM |
| 15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) | 16. No. of Acres in Lease | 17. Spacing Unit dedicated to t | his well |
| 995' | 320.00 | $\mathbb{E}/2$ | |
| Distance from proposed location to nearest well, drilling completed, applied for, on this lease, ft. 800' | 7276 MD | 20. BLM/BIA Bond No. on file WY2924 | |
| 21. Elevations (Show whether DF, KB, RT, GL, etc. 5961 GL | 22. Approximate date work will start 05/15/2003 | 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 Sy SUPO shall be filed with the appropriate Forest Service C | Item 20 about the Lands, the 5. Operator co | ertification site specific information and/or plans as may be r | • |
| 25. Signature (Electronic Submission) | Name (Printed/Typed) MARY CORLEY | | Date 04/08/2003 |
| Title AUTHORIZED REPRESENTATIVE | | | |
| Approved by (Signature) Approved by (Signature) Approved by (Signature) Approved by (Signature) | Name (Printed/Typed) | | WAY 22 2003 |
| Title Title | Office | | |
| Application approval does not warrant or certify the applicant loperations thereon. Conditions of approval, if any, are attached. | nolds legal or equitable title to those rights | in the subject lease which would entitle the applic | ant to conduct |
| | | and willfully to make to any dengatment or agence | y of the United |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 States any false, fictitious or fraudulent statements or represent | ations as to any matter within its incidition | and williamy to make to any department of agent | y of the Office |

Electronic Submission #20381 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 3165.8 and appeal pursuant to 43 CFR 3165.4

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

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

Pool Code

| | API Number | | Pool Code | | |) Pool Name | | | | | | | |
|------------------------------|---------------------------------------|----------------------------|---------------------------------------|----------------|--------------------|--|-----------------------|------------------------|---|--|--|--|--|
| 30-04 | API Number | 1618 | 7159 | 9 € 723. | 19 BA | BASIN DAKOTA & BLANCO LLESAVERDE Property Name • Well Number | | | | | | | |
| Property (| Code | ³ Property Name | | | | | | | ٥ | Well Number | | | |
| 000910 | | | Mudge | idge Gas Com D | | | | | | # 1M | | | |
| 7 OGRID | No. | | | Operator Name | | | | | | Élevation | | | |
| 00011 | 8 | | BP AMI | ERICA P | PRODUCTION COMPANY | | | | | | 5961 | | |
| | | | | 10 | Surface I | Location | | | | | | | |
| UL or Lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the East/We | | East/West I | ino | County | | |
| J | 12 | 31 N | 11 W | | 2485 | SOUTH | <u> </u> | | EAST SA | | SAN JUAN | | |
| | · · · · · · · · · · · · · · · · · · · | | · | ······ | ocation If | Different From | , | | , | | | | |
| ¹ UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet t | Feet from the East/Wes | | West line County | | | |
| ¹³ Dedicated Acre | s '' Join | t or Infill | | 13 Ord | ler No. | | J | | 1 | | | | |
| 320 | | | | | | | | | | | | | |
| NO ALLO | WABLE | WILL BE | ASSIGNE | D TO THIS | COMPLETI | ON UNTIL ALL | INTER | ESTS H | AVE BEE | N CO | NSOLIDATED | | |
| | | OR. | | | INIT HAS B | EEN APPROVED | BYT | HE DIV | ISION | | | | |
| 16 | | | | 5251 (R) ~~ | ~~~ | ~~~~~ | ~~ <u>\$</u> | 17 OPE | RATOR | CER' | TIFICATION | | |
| | | | | ß | \mathcal{D} | BM | 3 | | | | tion contained herein is | | |
| | | | | \ | * | | \$ | true and c | complete to the | Dest of . | my knowledge and belief. | | |
| | | | | 1 | 223747 | 472 |) | | | | | | |
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| (R) | | | | | MAY | | \$ | · F | Mary | Corl | ecr | | |
| 2592 | | | | 1 199 | C, , | 103 | 8 | Signature | 10.11. | 7 | 0, | | |
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| | | | | Fig. | | 120 0 |) | 51. | Roge | lake | DRY ANDLUST | | |
| | | | | | | | | Title | 1 00 | 0 3 | 2 | | |
| | | | | \ | Sell on a | 1.193 | { | Date | 4,08. | 03 | 2 | | |
| | | | | } | Marie Carlot | A A A |) | | | | | | |
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| | | | | | 0 9- | 1695' | | | | | ation shown on this plat wal surveys made by me | | |
| | | | | } | m | D - |) | or under | my supervision | n, and the | at the same is true and | | |
| | | | | ß | | 1 Da | } | correct to | o the best of the January | - | | | |
| | | | |) | | | | Date of S | | , 17, | | | |
| | | | | R | | |) | Signatur | e and Seal of I | Profession | nal Surveyor | | |
| 8 | | | | 8 | | | a a | | A | D. Va | \sim | | |
| 2608(R) | | | | l l | 2485' | | -) | | CARY | ME | 14 | | |
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| | 265 | 5(R) | | | 26 | 22 R) | | Certificat | c Number | HBIZZ | | | |

(R) - BLM Record

BP AMERICA PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM

Prospect Name: Mudge GC

Form 46 12-00 MNP

Lease: MUDGE GC
County: San Juan

State: New Mexico
Date: March 31, 2003

Well No: D 1M

Surface Location: 12-31N-11W, 2485 FSL, 1695 FEL

Field: Blanco Mesaverde/Basin Dakota

| ME | | DRILLING | | | APPROXI | | | | | | I MA | RKFR |
|--|--|--|---|--|---|--|---|--|--|--|--------|--------------|
| TYPE OF TOOLS DEPTH OF DRILLING | | | | | APPROXIMATE DEPTHS OF GEOLOGICAL MARKER Estimated GL: 5961 Estimated KB: 5975 | | | | | | | |
| Rotary | | | | | | | 1 330 | | | | | D/TVD. |
| | | MARKER | | | | SUBSEA | | | | | | |
| | Ojo Alamo | | | | 4485' | | | 1491 | | | | |
| | | | | | Kirkland Fruitland | | | | | 187 | | 1789 |
| TYPE | | DEPTH INVE | ED A 1 | | Fruitland Co | | | | | 3912' 3657' | | 2064 2318 |
| OPEN HOLE | | DEFINING | LKAL | | Pictured Cli | | * | | | 3284' | | 269° |
| none | | | | | Lewis Shale | | # | | | 3066' | | 2909 |
| ,,,,,,, | | | | | Cliff House | | # | | | 1778' | | 419 |
| | | | | | Menefee Sh | ale | # | | | 1424 | | 455 |
| CASED HOLE | | | | | Point Looko | ut | # | | | 1029' | | 494 |
| GR-CCL-TDT | | | | T - TD to 7" shoe | | | | | | 748' | | 522 |
| CBL | Identify 4 ½" cement top | | | top | Mancos Greenhorn | | | | | -969' | | 694 |
| | | | | | Bentonite M | arker | | | -1 | 1021' | | 6990 |
| REMARKS: | | | | | Two Wells | | # | | | 1079' | | 7054 |
| Please report any flares | s (magnitud | e & duration) | | | Paguate | | # | | | 1167' | | 7142 |
| | | | | | Cubero Upp | | * | | | 200' | | 717 |
| | | | | | Cubero Low | | | | | 231' | | 7206 |
| | | | | | TOTAL DEF | | | | | 301' | | 7276 |
| | | | | | # Probable | | | | * Pc | ssible P | | |
| | SPECIAL | TESTS | | | | DRILL CUTTING SAMPLES | | | | DRILL | | |
| TYPE | | | | | FREQUEN | CY | DEPT | | | QUENC | Ϋ́ | DEPTH |
| None | | | | | none | | Product | ion hole | Geolo | graph | | 0-TD |
| REMARKS: | | | | | | | | | | | | |
| | | | | | 1 | | | | | | | |
| | | | | | • | | | | | | | |
| MUD PROGRAM: | | | | | | | | | | | | |
| | | Type Mud | | Weight, #/g | ıa Vis, sec/c | t V | //L cc' | s/30 mii | ı O | ther Sp | pecifi | cation |
| Approx. Interval | | Type Mud Spud | | Weight, #/g 8.6-9.2 | a Vis, sec/c | t V | //L cc' | s/30 mii | n 0 | ther Sp | oecifi | cation |
| Approx. Interval 0 - 200 | (1) | | | | a Vis, sec/c | t W | | s/30 mii | ո 0 | ther Sp | pecifi | cation |
| Approx. Interval 0 - 200 200 - 3009 | (1) | Spud | 1D | 8.6-9.2 8.6-9.2 | 1 | < | 6 | | | | pecifi | cation |
| Approx. Interval 0 - 200 200 - 3009 3009 - 7276 | (1) | Spud Water/LSN | 1D | 8.6-9.2 8.6-9.2 | Vis, sec/o | < | 6 | | | | pecifi | cation |
| Approx. Interval 0 - 200 200 - 3009 3009 - 7276 REMARKS: | | Spud Water/LSN Gas/Air/N2 | ND 2/Mist | 8.6-9.2 8.6-9.2 Volume s | ufficient to ma | < intain | 6 a stab | le and cl | ean w | ellbore | | cation |
| Approx. Interval 0 - 200 200 - 3009 3009 - 7276 REMARKS: (1) The hole will requir | e sweeps | Spud Water/LSN Gas/Air/N2 to keep unl | ND 2/Mist oaded v | 8.6-9.2 8.6-9.2 Volume s | ufficient to ma | intainLet h | 6 a stab ole cor | le and cl | ean w | ellbore freque | ncy. | |
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| 200 - 3009 3009 - 7276 REMARKS: (1) The hole will requir CASING PROGRAM: Casing String | e sweeps (Normally, tu | Spud Water/LSN Gas/Air/N2 to keep unlubular goods a | ND 2/Mist oaded v | 8.6-9.2 8.6-9.2 Volume s while fresh letter specifie | ufficient to ma water drilling. s casing sizes to l Grade | intain Let h | 6 a stab ole cor . Hole s | le and cl nditions o sizes will be Hole S i | ean wedictate | ellbore frequented by Co | ncy. | |
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| Approx. Interval 0 - 200 200 - 3009 3009 - 7276 REMARKS: (1) The hole will requir CASING PROGRAM: Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement to the companies of the companie | re sweeps (Normally, tu Estima o Surface o Lewis Sh above 7" s RAM: ited Entry i: | Spud Water/LSN Gas/Air/N2 to keep unlubular goods a ted Depth 200 3009 7276 male shoe | ND 2/Mist coaded villocation Casin | 8.6-9.2 8.6-9.2 Volume s while fresh letter specifie g Size 9 5/8" 7" 4 1/2" | ufficient to ma water drilling. s casing sizes to leade H-40 ST&C J/K-55 ST&C J-55 | Let hoe used We | 6 a stab ole cor Hole s ight 32# 20# 1.6# | le and cl nditions of sizes will be Hole Si 13 8. 6. | ean wedictate e governize L 3.5" 175" 125" 3 | ellbore frequenced by Contained anding | ncy. | |
| Approx. Interval 0 - 200 200 - 3009 3009 - 7276 REMARKS: (1) The hole will requir CASING PROGRAM: Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement to (2) Set casing 100' into (3) Bring cement 100' CORING PROGRAM: None COMPLETION PROGRAM | re sweeps (Normally, tu Estima o Surface o Lewis Sh above 7" s RAM: ited Entry i: | Spud Water/LSN Gas/Air/N2 to keep unleaded between the second sec | ND 2/Mist oaded v llocation Casin | 8.6-9.2 8.6-9.2 Volume s while fresh letter specifie g Size 9 5/8" 7" 4 1/2" | ufficient to ma water drilling. s casing sizes to l Grade H-40 ST&C J/K-55 ST&C J-55 | Let hoe used We | 6 a stab ole cor Hole s ight 32# 20# 1.6# | le and cl nditions of sizes will be Hole Si 13 | ean wedictate e governize L 3.5" 175" 125" 3 | ellbore frequenced by Contained anding | ncy. | |
| Approx. Interval 0 - 200 200 - 3009 3009 - 7276 REMARKS: (1) The hole will requir CASING PROGRAM: Casing String Surface/Conductor Intermediate 1 Production REMARKS: (1) Circulate Cement to the companies of the companie | re sweeps (Normally, tu Estima o Surface o Lewis Sh above 7" s RAM: ited Entry i: | Spud Water/LSN Gas/Air/N2 to keep unleaded between the second sec | ND 2/Mist coaded villocation Casin | 8.6-9.2 8.6-9.2 Volume s while fresh letter specifie g Size 9 5/8" 7" 4 1/2" | ufficient to ma water drilling. s casing sizes to leade H-40 ST&C J/K-55 ST&C J-55 | Let h pe used We 1 | a stab ole cor Hole s ight 32# 20# 1.6# | le and cl nditions of sizes will be Hole Si 13 8. 6. | ean wedictate e governize L 3.5" 175" 125" 3 | ellbore frequenced by Contained anding | ncy. | |

BP America Production Company BOP Pressure Testing Requirements

Well Name: Mudge GC

County: San Juan

D 1M

State: New Mexico

| Formation | TVD | Anticipated Bottom Hole Pressure | Maximum Anticipated Surface Pressure ** |
|----------------|------|-------------------------------------|---|
| Ojo Alamo | 1491 | | |
| Fruitland Coal | 2318 | | |
| PC | 2691 | | |
| Lewis Shale | 2909 | | |
| Cliff House | 4197 | 500 | 0. |
| Menefee Shale | 4551 | | |
| Point Lookout | 4946 | 600 | 0 |
| Mancos | 5227 | | |
| Dakota | 7054 | 2600 | 1449 |

^{**} Note: Determined using the following formula: ABHP - (.22*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

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.