Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANGEMENT

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.***

2006 JUL 19 AM 7 03

***SUBMIT IN TRIPLICATE – Other instructions on reverse side***

RECEIVED
070 FARMINGTON NM

5. Lease Serial No.
**NMSF – 078655**

6. If Indian, Allottee or tribe Name

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

JUL 2006
RECEIVED
OIL CONS. DIV.
DIST. 3

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

8. Well Name and No.
**Decker LS 1M**

2. Name of Operator
**BP AMERICA PRODUCTION COMPANY**

9. API Well No.
**30-045-32074**

3a. Address
**PO BOX 3092 HOUSTON, TX 77253**

3b. Phone No. *(include area code)*
**281-366-4081**

10. Field and Pool, or Exploratory Area
**BASIN DAKOTA & BLANCO MV**

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
**2490'' FSL & 1655' FWL; SEC 17 T32N R10W NESW**

11. County or Parish, State
**SAN JUAN, NM**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OR 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 Casing Sizes** |
| | ☐ Change Plans | ☐ Plug and Abandon | ☐ Water Disposal | |
| | ☐ Convert to Injection | ☐ Plug Back | | |

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.

On 12/17/2003 BP submitted application for permit to drill. **APD was approved 08/19/04 & extension approved to Aug. 19, 2006.**

It is now our intent to change the casing sizes. The design changes are to better manage the lost circulation issues while drilling through the Fruitland Coal. Instead of setting the Intermediate csg into the Lewis we are planning to topset the coal with an upsized intermediate string & thus include the possibility of running a contingency drilling liner in case we encounter wtr influx from the FC or PC while drilling to the DK. In that case contingency will apply. Should we not encounter any fluid influx the design alternative #1 as shown on Revised Form 46 will apply. Please see attached Revised Form 46 & cement program showing the contingency, which is not expected to be used.

14. I hereby certify that the foregoing is true an dcorrect
*Name* (Printed/typed)

**Cherry Hlava** | Title **Regulatory Analyst**

Signature Cherry Hlava | Date **07/17/2006**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by Jim Lovato | Title Petr. Eng | Date 7/20/06

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 witin its jurisdiction.

NMOCD

# BP AMERICA PRODUCTION COMPANY

## DRILLING AND COMPLETION PROGRAM

11/18/2003 **Revised 07/11/2006**

| | | | | | |
|---|---|---|---|---|---|
| **Lease:** | Decker LS | **Well Name & No.** | Decker LS #1M | **Field:** | Blanco Mesaverde/Basin Dakota |
| **County:** | San Juan, New Mexico | **Surface Location:** | 17-32N-10W: 2490' FSL, 1655' FWL | | |
| **Minerals:** | State | **Surface:** | Lat: 36.9846577 deg; Long: -107.9084797 deg | | |
| **Rig :** | Aztec 184 | **BH Location:** | same | | |
| **OBJECTIVE:** | Drill 300' below the top of the Two Wells Mbr, set 4-1/2" production casing, Stimulate DK, MF, and PL intervals. | | | | |

**METHOD OF DRILLING**

| TYPE OF TOOLS | DEPTH OF DRILLING |
|---|---|
| Rotary | 0 - TD |

**LOG PROGRAM**

| Type | Depth Interval |
|---|---|
| Single Run | |
| | |
| | |
| Cased Hole | |
| TDT- CBL | TD to 7 5/8" shoe |
| | Identify 4 ½" cement top |

**REMARKS:**

- Please report any flares (magnitude & duration).

**APPROXIMATE DEPTHS OF GEOLOGICAL MARKER**

Actual GL: 6128 Estimated KB: 6,142.0'

| Marker | | SUBSEA | TVD | APPROX. MD |
|---|---|---|---|---|
| Ojo Alamo | | 4,934' | 1,208' | 1,208' |
| Kirtland | | 4,871' | 1,271' | 1,271' |
| Fruitland | * | 3,909' | 2,233' | 2,233' |
| Fruitland Coal | * | 3,679' | 2,463' | 2,463' |
| Pictured Cliffs | * | 3,232' | 2,910' | 2,910' |
| Lewis | * | 2,855' | 3,287' | 3,287' |
| Cliff House | # | 1,672' | 4,470' | 4,470' |
| Menefee | # | 1,269' | 4,873' | 4,873' |
| Point Lookout | # | 961' | 5,181' | 5,191' |
| Mancos | | 561' | 5,581' | 5,581' |
| Greenhorn | | -1,115' | 7,257' | 7,257' |
| Graneros (bent,mkr) | | -1,165' | 7,307' | 7,307' |
| Two Wells | # | -1,241' | 7,383' | 7,383' |
| Paguate | # | -1,294' | 7,436' | 7,436' |
| Cubero | # | -1,324' | 7,466' | 7,466' |
| L. Cubero | # | -1,346' | 7,488' | 7,488' |
| Encinal Cyn | # | -1,383' | 7,525' | 7,525' |
| Burro Cyn | # | -1,442' | 7,584' | 7,584' |
| TOTAL DEPTH: | | -1,541' | 7,683' | 7,683' |

# Probable completion interval * Possible Pay

**SPECIAL TESTS**

| TYPE |
|---|
| None |

**REMARKS:**

| DRILL CUTTING SAMPLES | | | DRILLING TIME | |
|---|---|---|---|---|
| FREQUENCY | DEPTH | | FREQUENCY | DEPTH |
| 30'/10' intervals | 2,413' | to TD | Geolograph | 0 - TD |

**MUD PROGRAM:**

| Approx. | TypeMud | Weight, | Vis, sec/qt | W/L cc's | Other Specification |
|---|---|---|---|---|---|
| 200' | Spud | 8.8 - 9.0 | Sufficient to clean hole. | | |
| 2,413' | Water/LSND | 8.4 - 9.0 | | <9 | Sweep hole while whilst water drilling, LCM onsite |
| 7,683' | Air | 1 | 1000 cfm for hammer | | Volume sufficient to maintain a stable and clean wellbore |

**CASING PROGRAM:**

| CasingString | Estimated | Hole | Casing Size | Grade, Thread | Weight | Landing Point | Cement |
|---|---|---|---|---|---|---|---|
| Surface/Conductor | 200' | 14 3/4" | 10 3/4" | J-55 ST&C | 40.5# | | cmt to surface |
| Intermediate | 2,413' | 9 7/8" | 7 5/8" | K-55 LT &C | 26.4# | 50' above FC | cmt to surface |
| Production | 7,683' | 6 3/4" | 4-1/2" | P-110 | 11.6# | DKOT | 150' inside Intermediate - TOC survey required |

**CONTINGENCY; In case of water influx below the intermediate pipe we will run the following casing program:**

| CasingString | Estimated | Hole | Casing Size | Grade, Thread | Weight | Landing Point | Cement |
|---|---|---|---|---|---|---|---|
| Surface/Conductor | 200' | 14 3/4" | 10 3/4" | J-55 ST&C | 40.5# | | cmt to surface |
| Intermediate | 2,413' | 9 7/8" | 7 5/8" | K-55 LT &C | 26.4# | 50' above FC | cmt to surface |
| Production | 5,681' | 6 3/4" | 5-1/2" | P-110 LT &C | 17# | 100' into MNCS | 150' inside Intermediate |
| Production Liner | 7,683' | 4 3/4" | 3 1/2" | L-80 Hyd 511 | 9.2# | TD | 100' inside Production Cas. |

**CORING PROGRAM:**

None

**COMPLETION PROGRAM:**

Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead

**GENERAL REMARKS:**

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

**BOP Pressure Testing Requirements**

| Formation | Depth | Anticipated bottom hole pressure | Max anticipated surface pressure** |
|---|---|---|---|
| **Cliffhouse** | 4,470' | 500 | 0 |
| **Point Lookout** | 5,181' | 600 | 0 |
| **Dakota** | 7,383' | 2600 | 975.74 |

Requested BOP Pressure Test Exception = 1500 psi

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

| Form 46 Reviewed by: | Logging program reviewed by: | | | | |
|---|---|---|---|---|---|
| **PREPARED BY:** | **APPROVED:** | **DATE:** | **APPROVED:** | **DATE:** | |
| HGJ JMP | | 11/18/2003 Revised 07/11/2006 | | | |
| Form 46 7-84bw | For Drilling Dept. | | For Production Dept. | | |

# Cementing Program

| | | | |
|---|---|---|---|
| Well Name: | Decker LS #1M | | |
| Location: | 17-32N-10W: 2490' FSL, 1655' FWL | | |
| County: | San Juan | | |
| State: | New Mexico | Formation: | Blanco Mesaverde/Basin Dakota |
| | | KB Elev (est) | 6142 |
| | | GL Elev. (est) | 6128 |

**Casing Program:**

| Casing String | Est. Depth (ft.) | Hole Size (in.) | Casing Size (in.) | Thread | TOC (ft.) |
|---|---|---|---|---|---|
| Surface | 200 | 14 3/4 | 10 3/4 | ST&C | Surface |
| Intermediate | 2413 | 9 7/8 | 7 5/8 | LT&C | Surface |
| Production - | 5681 | 6 3/4 | 5 1/2 | LT&C | 2263 |
| Production -Liner | 7683 | 4 3/4 | 3 1/2 | L80 Hyd 551 | 5581 |

**Casing Properties:** (No Safety Factor Included)

| Casing String | Size (in.) | Weight (lb/ft) | Grade | Burst (psi.) | Collapse (psi.) |
|---|---|---|---|---|---|
| Surface | 10 3/4 | 40.5 | J55 | 3130 | 1580 |
| Intermediate | 7 5/8 | 26.4 | K-55 | 4140 | 2890 |
| Production - | 5 1/2 | 17 | P110 | 10640 | 7460 |
| Production - Liner | 3 1/2 | 9.2 | L80 | 10159 | 10533 |

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 | Production- Liner |
|---|---|---|---|---|
| Excess %, Lead | 100 | 75 | 40 | n/a |
| Excess %, Tail | NA | 0 | 40 | 40 |
| BHST (est deg. F) | 78 | 111 | 160 | 190 |
| Special Instructions | 1,6,7 | 1,6,8 | 2,4,6 | 2,4,6 |

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 minmize drillout.

**Surface:**

| | | | |
|---|---|---|---|
| | Preflush | 20 bbl. | FreshWater |
| | **Slurry 1** | **175 sx Class C Cement** | **223 cuft** |
| | TOC@Surface | + 2% CaCl2 (accelerator) | |
| | | | 0.5563 cuft/ft OH |

| 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

# Cementing Program

**Intermediate:**

| | | | | |
|---|---|---|---|---|
| | Fresh Water | 20 bbl | fresh water | |
| | **Lead** | **323** | **sx Class "G" Cement** | **850 cuft** |
| | Slurry 1 | | + 3% D79 extender | |
| | TOC@Surface | | +1/4 #/sk. Cellophane Flake | |
| | | | + 5 lb/sk Gilsonite | |
| | **Tail** | **104** | **sx 50/50 Class "G"/Poz** | **132 cuft** |
| | Slurry 2 | | + 2% gel (extender) | |
| | 500 ft fill | | +1/4 #/sk. Cellophane Flake | 0.2646 cuft/ft OH |
| | | | + 2% CaCl2 (accelerator) | 0.2836 cuft/ft csg ann |
| | | | + 5 lb/sk Gilsonite | |

| Slurry Properties: | Density (lb/gal) | Yield (ft3/sk) | Water (gal/sk) |
|---|---|---|---|
| Slurry 1 | 11.4 | 2.63 | 15.8 |
| Slurry 2 | 13.5 | 1.27 | 5.72 |

Casing Equipment: 7", 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 as needed
1 Top Rubber Plug
1 Thread Lock Compound

**Production:**

| | | | | |
|---|---|---|---|---|
| | Fresh Water | 10 bbl | CW100 | |
| | **Lead** | **160** | **LiteCrete D961 / D124 / D154** | **403 cuft** |
| | Slurry 1 | | + 0.03 gps D47 antifoam | |
| | TOC, 150' above 7 5/8" shoe | | + 0.5% D112 fluid loss | |
| | | | + 0.11% D65 TIC | |
| | | | | 0.0835 cuft/ft OH |

| Slurry Properties: | Density (lb/gal) | Yield (ft3/sk) | Water (gal/sk) | 0.0999 cuft/ft csg ann |
|---|---|---|---|---|
| Slurry 1 | 9.5 | 2.52 | 6.38 | |

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, as needed
1 Top Rubber Plug
1 Thread Lock Compound

**Production - Liner**

| | | | | |
|---|---|---|---|---|
| | Fresh Water | 10 bbl | CW100 | |
| | Lead | 120 | sx 50/50 Class "G"/Poz | 173 cuft |
| | Slurry 1 | | + 5% D20 gel (extender) | |
| | TOC, 100' above 5 1/2" shoe | | + 0.1% D46 antifoam | |
| | | | + 1/4 #/sk. Cellophane Flake | |
| | | | + 0.25% D167 Fluid Loss | |
| | | | +0.1% d800, retarder | 0.05624 cuft/ft OH |
| | | | +0.15% D65, dispersant | |
| | | | | 0.0637 cuft/ft csg ann |

# Cementing Program

| Slurry Properties: | Density (lb/gal) | Yield (ft3/sk) | Water (gal/sk) |
|---|---|---|---|
| Slurry 1 | 13 | 1.44 | 6.5 |

Casing Equipment:

3-1/2", 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, as needed

1 Rubber Plug

1 Thread Lock Compound