

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: November 30, 2000

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
NMSF078095

|                                                                                                                                                                                                                               |  |                                    |                                                                                                                                                                                                                                                                                                                              |                                      |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--|
| 1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other                                                                   |  |                                    | 6. If Indian, Allottee or Tribe Name                                                                                                                                                                                                                                                                                         |                                      |  |
| b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr.<br>Other _____ |  |                                    | 7. Unit or CA Agreement Name and No.                                                                                                                                                                                                                                                                                         |                                      |  |
| 2. Name of Operator<br>BP AMERICA PRODUCTION CO                                                                                                                                                                               |  |                                    | 8. Lease Name and Well No.<br>MUDGE LS 23M                                                                                                                                                                                                                                                                                   |                                      |  |
| 3. Address P. O. BOX 3092<br>HOUSTON, TX 77253                                                                                                                                                                                |  |                                    | 9. API Well No.<br>30-045-30632-00-C1                                                                                                                                                                                                                                                                                        |                                      |  |
| 4. Location of Well (Report location clearly and in accordance with Federal requirements)*<br>At surface Sec 5 T31N R11W Mer NMP<br>NWSE 2210FSL 1940FEL<br>At top prod interval reported below<br>At total depth             |  |                                    | 10. Field and Pool, or Exploratory<br>BLANCO MV / BASIN DAKOTA                                                                                                                                                                                                                                                               |                                      |  |
| 14. Date Spudded<br>01/04/2003                                                                                                                                                                                                |  |                                    | 15. Date T.D. Reached<br>01/11/2003                                                                                                                                                                                                                                                                                          |                                      |  |
| 16. Date Completed<br><input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.<br>02/07/2003                                                                                                         |  |                                    | 17. Elevations (DF, KB, RT, GL)*<br>6204 GL                                                                                                                                                                                                                                                                                  |                                      |  |
| 18. Total Depth: MD 7443<br>TVD                                                                                                                                                                                               |  | 19. Plug Back T.D.: MD 7437<br>TVD |                                                                                                                                                                                                                                                                                                                              | 20. Depth Bridge Plug Set: MD<br>TVD |  |
| 21. Type Electric & Other Mechanical Logs Run (Submit copy of each)<br>OTH CBL                                                                                                                                                |  |                                    | 22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis)<br>Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis)<br>Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) |                                      |  |

23. Casing and Liner Record (Report all strings set in well)

| Hole Size | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sk. & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|-----------|------------|-------------|----------|-------------|----------------------|-----------------------------|-------------------|-------------|---------------|
| 13.250    | 9.625 H-40 | 32.0        | 0        | 229         |                      | 159                         |                   | 0           |               |
| 8.750     | 7.000 J-55 | 20.0        | 0        | 3133        |                      | 618                         |                   | 0           |               |
| 6.250     | 4.500 J-55 | 12.0        | 0        | 7443        |                      | 385                         |                   | 3033        |               |
|           |            |             |          |             |                      |                             |                   |             |               |
|           |            |             |          |             |                      |                             |                   |             |               |
|           |            |             |          |             |                      |                             |                   |             |               |

24. Tubing Record

| Size  | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|-------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|
| 2.375 | 7378           |                   |      |                |                   |      |                |                   |

25. Producing Intervals

| Formation | Top  | Bottom | Perforated Interval | Size  | No. Holes | Perf. Status |
|-----------|------|--------|---------------------|-------|-----------|--------------|
| A) DAKOTA | 7263 | 7421   | 7263 TO 7421        | 0.330 | 58        |              |
| B)        |      |        |                     |       |           |              |
| C)        |      |        |                     |       |           |              |
| D)        |      |        |                     |       |           |              |

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

| Depth Interval | Amount and Type of Material              |
|----------------|------------------------------------------|
| 7263 TO 7421   | 68,000# OF 20/40 RESIN SAND & SLICKWATER |
|                |                                          |
|                |                                          |

28. Production - Interval A

| Date First Produced | Test Date            | Hours Tested      | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|----------------------|-------------------|-----------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| 01/28/2003          | 01/29/2003           | 12                | ➡               | 1.0     | 1192.0  | 4.0       |                       |             | FLows FROM WELL   |
| Choke Size          | Tbg. Press. Flwg. SI | Csg. Press. 150.0 | 24 Hr. Rate     | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio         | Well Status |                   |
| 3/4                 | SI                   |                   | ➡               |         |         |           |                       | PGW         |                   |

28a. Production - Interval B

| Date First Produced | Test Date            | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|----------------------|--------------|-----------------|---------|---------|-----------|-----------------------|-------------|-------------------|
|                     |                      |              | ➡               |         |         |           |                       |             |                   |
| Choke Size          | Tbg. Press. Flwg. SI | Csg. Press.  | 24 Hr. Rate     | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio         | Well Status |                   |
|                     | SI                   |              | ➡               |         |         |           |                       |             |                   |

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #18439 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**\*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\***

**NMOCD**

ACCEPTED FOR RECORD

FEB 14 2003

FARMINGTON FIELD OFFICE

## 28b. Production - Interval C

|                     |                            |              |                      |         |         |           |                          |             |                   |
|---------------------|----------------------------|--------------|----------------------|---------|---------|-----------|--------------------------|-------------|-------------------|
| Date First Produced | Test Date                  | Hours Tested | Test Production<br>→ | Oil BBL | Gas MCF | Water BBL | Oil Gravity<br>Corr. API | Gas Gravity | Production Method |
| Choke Size          | Tbg. Press.<br>Flwg.<br>SI | Csg. Press.  | 24 Hr. Rate<br>→     | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio            | Well Status |                   |

## 28c. Production - Interval D

|                     |                            |              |                      |         |         |           |                          |             |                   |
|---------------------|----------------------------|--------------|----------------------|---------|---------|-----------|--------------------------|-------------|-------------------|
| Date First Produced | Test Date                  | Hours Tested | Test Production<br>→ | Oil BBL | Gas MCF | Water BBL | Oil Gravity<br>Corr. API | Gas Gravity | Production Method |
| Choke Size          | Tbg. Press.<br>Flwg.<br>SI | Csg. Press.  | 24 Hr. Rate<br>→     | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio            | Well Status |                   |

## 29. Disposition of Gas(Sold, used for fuel, vented, etc.)

SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

| Formation                           | Top       | Bottom | Descriptions, Contents, etc. | Name                                                                                        | Top                                          |
|-------------------------------------|-----------|--------|------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------|
|                                     |           |        |                              |                                                                                             | Meas. Depth                                  |
| OJO ALAMO<br>NACIMIENTO<br>KIRTLAND | 0<br>1192 | 1192   |                              | FRUITLAND COAL<br>PICTURED CLIFFS<br>LEWIS SHALE<br>CLIFF HOUSE<br>MENELEE<br>POINT LOOKOUT | 2230<br>2950<br>3040<br>4480<br>4832<br>5209 |

## 32. Additional remarks (include plugging procedure):

Dakota Completion. Well is downhole commingled with the Mesaverde. Please see attached for Well Subsequent Report Activity.

## 33. Circle enclosed attachments:

- |                                                       |                    |               |                       |
|-------------------------------------------------------|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7. Other:     |                       |

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #18439 Verified by the BLM Well Information System.**

**For BP AMERICA PRODUCTION CO, sent to the Farmington**

**Committed to AFMSS for processing by Adrienne Garcia on 02/14/2003 (03AXG0746SE)**

Name (please print) MARY CORLEYTitle AUTHORIZED REPRESENTATIVESignature (Electronic Submission)Date 02/10/2003

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.

**\*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\***

**MUDGE LS 232M  
COMPLETION SUBSEQUENT REPORT  
02/10/2003**

01/14/2003 RU & run TDT log. Run CBL under 1000# pressure. RU & pressure test CSG to 4500#. Test ok.

01/20/2003 RU & Perf the Dakota with 2 SPF, 120° phasing as follows: .330 inch diameter, 29 Shots / 58 Holes

7421', 7417', 7413', 7399', 7394, 7390', 7386', 7379', 7375', 7371', 7361', 7356', 7352',  
7347', 7336', 7329', 7324', 7319', 7314', 7309', 7303', 7298', 7294', 7289', 7284', 7280',  
7274', 7268', 7263'

01/21/2003 RU & Frac w/68,000# of 20/40 Resin Sand & Slickwater. SI well for night.

01/24/2003 ND BOP & Frac Valve. NU Flow back cross & BOP. SI well for weekend.

01/27/2003 TIH & tag fill @ 7332'. Circ hole & C/O to 7437'. PU above perfs & SDFN.

01/28/2003 TIH & tag 5' of fill. Circ clean to PBTD @ 7437'. PU above perfs & flow back well thru 3" line to pit. . RU & install ¾" choke & flow back well.

01/29/2003 RU & flow test well for 12 hrs. thru ¾" choke. 1192 MCF gas, FCP 150#. 4 BBLS WTR, trace oil. RU & TIH & tag 3' of fill. C/O to PBTD. RU & flow back well thru 3" line to pit.

**END OF DAKOTA COMPLETION.**

**BEGIN MESAVERDE COMPLETION.**

01/31/2003 RU & TIH w/CIBP & set @ 5700'. RU & load hole w/2% KcL WTR. RU & perf Point Lookout & Menefee, 120° phasing as follows, .410 inch diameter, 2 JSPF 30 Shots / 60 Holes

5405', 5395', 5383', 5373', 5363', 5341', 5327', 5316', 5295', 5276', 5256', 5246', 5225',  
5218', 5208', 5203', 5198', 5193', 5187', 5181', 5175', 5169', 5163', 5157', 5149', 5143',  
5137', 5131', 5115', 5075'

RU & Frac w/80,205# of 16/30 Brady Sand, 70% Quality Foam & N2. RU, TIH & set CIBP @, 5044'. RU & perf Menefee & Cliffhouse, 120° phasing as follows: .410 inch diameter, 2 JSPF 25 Shots / 50 Holes

5017', 5011', 5005', 4999', 4994', 4987', 4981', 4959', 4951', 4945', 4939', 4934', 4909',  
4904', 4896', 4869', 4864', 4823', 4814', 4803', 4796', 4790', 4767', 4761', 4751'

02/01/2003 RU & Frac w/70,802# of 16/30 Brady Sand, 70% Quality Foam & N2. RU, TIH & set CIBP @, 4704'. RU & perf Menefee & Cliffhouse, 120° phasing as follows: .410 inch diameter, 2 JSPF 30 Shots / 60 Holes

4671', 4664', 4655', 4642', 4634', 4622', 4616', 4609', 4603', 4597', 4591', 4585', 4580',  
4548', 4535', 4521', 4510', 4504', 4499', 4494', 4489', 4483', 4477', 4454', 4444', 4437',  
4411', 4396', 4380', 4357'

RU & Frac w/73,990# of 16/30 Brady Sand, 70% Quality Foam & N2. ND Frac & NU Flow back head. Open well on ¼" choke & flow back overnight.

02/02/2003 @ 00:00 hrs upsized choke to ½" & flowed back for 6 hrs. Upsized choke to ¾" & flowed back 9 hrs.

02/03/2003 TIH & tag fill @ 4600'. C/O to CIBP set @ 4704'. DO CIBP. Circ hole clean. TIH & tag fill @ 5012'. C/O to 5020'. PU above perfs & flow back well thru ¾" choke w/watchman.

02/04/2003 Flow back well thru ¾" choke. TIH & tag fill @ 5012'. C/O to CIBP set @ 5044'. Circ hole clean to CIBP set @ 5700'. Circ hole clean. PU above perfs & flow test well for 12 hrs. thru ¾" choke. 1011 MCF gas, FCP 125#, 8 BBLS WTR, Trace oil.

02/05/2003 Flow back well thru ¾" choke. TIH & tag 8' of fill. C/O to CIBP set @ 5700'. Mill out CIBP. Circ hole clean to PBTD. RU & flow back well thru ¾" choke overnight.

02/06/2003 TIH & tag 0 fill. Circ hole. Secure well & SDFN.

02/07/2003 RU & TIH w/BHA & TBG plug. TIH w/ 2 3/8" production TBG & land @ 7378'. ND BOP. NUWH. Pull TBG plug. RD & MOSU. Rig Release @ 10:00 hrs.