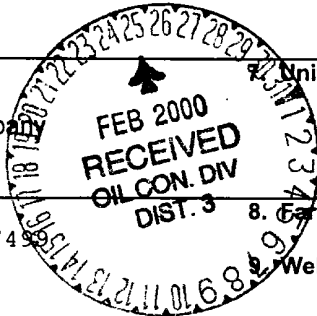


**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

|  |   |
|--|---|
| <p><b>1a. Type of Work</b><br/>DRILL</p>   | <p><b>5. Lease Number</b><br/>SF-079419<br/><b>Unit Reporting Number</b></p>  |
| <p><b>1b. Type of Well</b><br/>GAS</p>   | <p><b>6. If Indian, All. or Tribe</b></p>   |
| <p><b>2. Operator</b><br/><b>BURLINGTON RESOURCES</b> Oil &amp; Gas Company</p>  | <p><b>Unit Agreement Name</b><br/>San Juan 28-6 Unit</p>  |
| <p><b>3. Address &amp; Phone No. of Operator</b><br/>PO Box 4289, Farmington, NM 87499<br/><br/>(505) 326-9700</p>     | <p><b>8. Farm or Lease Name</b><br/>San Juan 28-6 Unit<br/><b>Well Number</b><br/>93B</p>   |
| <p><b>4. Location of Well</b><br/>383' FNL, 2527' FWL<br/><br/>Latitude 36° 37.4, Longitude 107° 25.1</p>              | <p><b>10. Field, Pool, Wildcat</b><br/>Blanco Mesaverde<br/><b>11. Sec., Twn, Rge, Mer. (NMPM)</b><br/>Sec. 36, T-28-N, R-6-W<br/><b>API #</b> 30-039-26287</p> |
| <p><b>14. Distance in Miles from Nearest Town</b><br/>36 miles from Blanco</p>   | <p><b>12. County</b>                      <b>13. State</b><br/>Rio Arriba                      NM</p>   |
| <p><b>15. Distance from Proposed Location to Nearest Property or Lease Line</b><br/>383'</p>                           | <p><b>17. Acres Assigned to Well</b><br/>321.22 W/2<br/>.21</p>   |
| <p><b>18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease</b><br/>1000'</p> | <p><b>20. Rotary or Cable Tools</b><br/>Rotary</p>  |
| <p><b>19. Proposed Depth</b><br/>5896'</p>   | <p><b>22. Approx. Date Work will Start</b></p>  |
| <p><b>21. Elevations (DF, FT, GR, Etc.)</b><br/>6533' GR</p>   | <p><b>23. Proposed Casing and Cementing Program</b><br/>See Operations Plan attached</p>  |
| <p><b>24. Authorized by:</b> <u><i>Regan Cole</i></u><br/>Regulatory/Compliance Administrator</p>                      | <p>DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"<br/><br/><u>10-27-99</u><br/>Date</p>                          |



PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY /s/ Charlie Beecham TITLE \_\_\_\_\_ DATE FEB 23 2000

Archaeological Report to be submitted  
 Threatened and Endangered Species Report to be submitted  
 NOTE: This format is issued in lieu of U.S. BLM Form 3160-3  
 Title 18 U.S.C. Section 1001, makes 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 presentations as to any matter within its jurisdiction.

*chsc*

**NMCCD**

DISTRICT I  
P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994

DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719

Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, NM 87504-2088

AMENDED REPORT

DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

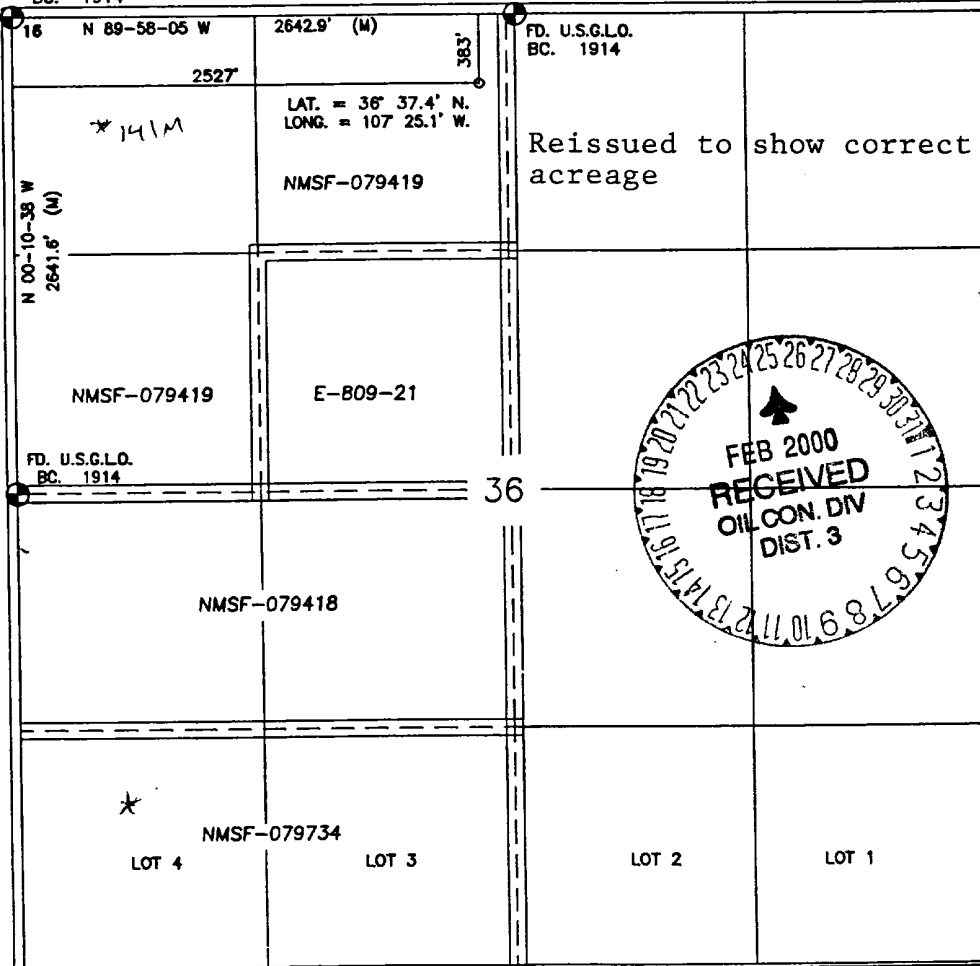
|   |  |                                 |  |
|---|--|---------------------------------|--|
| <sup>1</sup> API Number<br>30-039-26287 |  | <sup>2</sup> Pool Code<br>72319 | <sup>3</sup> Pool Name<br>Blanco Mesaverde |
| <sup>4</sup> Property Code<br>7462      | <sup>5</sup> Property Name<br>SAN JUAN 28-6 UNIT                     |                                 | <sup>6</sup> Well Number<br>93B            |
| <sup>7</sup> GRID No.<br>14538          | <sup>8</sup> Operator Name<br>BURLINGTON RESOURCES OIL & GAS COMPANY |                                 | <sup>9</sup> Elevation<br>6533'            |

| <sup>10</sup> 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                              | 36      | 28-N     | 6-W   |         | 383           | NORTH            | 2527          | WEST           | RIO ARRIBA |

| <sup>11</sup> Bottom Hole Location If Different From Surface   |         |          |       |         |               |                  |               |                |        |
|--|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot no.  | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| <sup>12</sup> Dedicated Acres W/321.21<br><sup>13</sup> Joint or Infill<br><sup>14</sup> Consolidation Code<br><sup>15</sup> 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

FD. U.S.G.L.O.  
BC. 1914



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Peggy Cole*  
 Signature  
 Peggy Cole  
 Printed Name  
 Regulatory Administrator  
 Title  
 1-6-00  
 Date

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.

10-1  
 Date of Survey  
 Signature and Seal  
 CRAY A. RUSH  
 NEW MEXICO  
 PROFESSIONAL LAND SURVEYOR  
 8894  
 8894  
 Certificate Number

## OPERATIONS PLAN

Well Name: San Juan 28-6 Unit #93B  
Surface Location: 383' FNL, 2527' FWL, Section 36, T-28-N, R-6-W  
Rio Arriba County, New Mexico  
Latitude 36° 37.4, Longitude 107° 25.1  
Formation: Blanco Mesa Verde  
Elevation: 6533' GL

| <u>Formation Tops:</u> | <u>Top</u>   | <u>Bottom</u> | <u>Contents</u> |
|------------------------|--------------|---------------|-----------------|
| Surface                | San Jose     | 2641'         | aquifer         |
| Ojo Alamo              | 2641'        | 2741'         | aquifer         |
| Kirtland               | 2741'        | 2950'         | gas             |
| <b>Intermediate TD</b> | <b>2841'</b> |               |                 |
| Fruitland              | 2950'        | 3331'         | gas             |
| Pictured Cliffs        | 3331'        | 3452'         | gas             |
| Lewis                  | 3452'        | 3922'         | gas             |
| Mesa Verde             | 3922'        | 4270'         | gas             |
| Chacra                 | 4270'        | 4993'         | gas             |
| Massive Cliff House    | 4993'        | 5146'         | gas             |
| Menefee                | 5146'        | 5496'         | gas             |
| Point Lookout          | 5496'        |               | gas             |
| <b>Total Depth</b>     | <b>5896'</b> |               |                 |

### Logging Program:

Cased hole Gamma Ray, Cement bond - surface to TD  
Mud Logs/Coring/DST - none

### Mud Program:

| <u>Interval- MD</u> | <u>Type</u> | <u>Weight</u> | <u>Vis.</u> | <u>Fluid Loss</u> |
|---------------------|-------------|---------------|-------------|-------------------|
| 0- 120'             | Spud        | 8.4-9.0       | 40-50       | no control        |
| 120- 2841'          | LSND        | 8.4-9.0       | 30-60       | no control        |
| 2841- 5896'         | Air/Mist    | n/a           | n/a         | n/a               |

Pit levels will be visually monitored to detect gain or loss of fluid control.

### Casing Program (as listed, the equivalent, or better):

| <u>Hole Size</u> | <u>Measured Depth</u> | <u>Csg Size</u> | <u>Weight</u> | <u>Grade</u> |
|------------------|-----------------------|-----------------|---------------|--------------|
| 12 1/4"          | 0' - 120'             | 9 5/8"          | 32.3#         | H-40         |
| 8 3/4"           | 0' - 2841'            | 7"              | 20.0#         | J-55         |
| 6 1/4"           | 2741' - 5896'         | 4 1/2"          | 10.5#         | J-55         |

Tubing Program: 0' - 5896' 2 3/8" 4.7# J-55

### BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).  
After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

BOP Specifications, Wellhead and Tests (cont'd):Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead -

9 5/8" x 7" x 2 3/8" x 2000 psi tree assembly.

General -

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drill crew.
- All BOP tests & drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9 5/8" surface casing - cement with 96 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (113 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -

Lead w/250 sx Class "B" w/3% sodium metasilicate, 7# gilsonite/sx and 0.5# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% gel, 2% calcium chloride, 7# gilsonite/sx and 0.5# flocele/sx (855 cu.ft. of slurry, 100% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 2741'. Two turbolating centralizers at the base of the Ojo Alamo at 2741'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

## 4 1/2" Production Liner -

Cement to circulate liner top. Pump 357 sx 50/50 Class "B" Poz w/1/4# flocele/sx, 2% gel, 0.1% retardant, 5# gilsonite/sx and 0.4% fluid loss additive (453 cu.ft., 40% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Special Drilling Operations (Air/Mist Drilling):

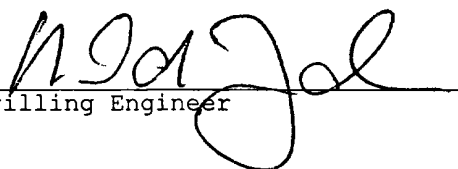
The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well..

Additional Information:

- The Mesa Verde formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:
 

|                 |         |
|-----------------|---------|
| Fruitland Coal  | 800 psi |
| Pictured Cliffs | 800 psi |
| Mesa Verde      | 700 psi |
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of Section 36 is dedicated to the Mesa Verde.
- This gas is dedicated.

  
Drilling Engineer

10/28/99  
Date

# BURLINGTON RESOURCES OIL & GAS COMPANY

## SAN JUAN 28-6 UNIT No. 93B

NW/4 SECTION 36, T-28-N, R-6-W, N.M.P.M.

RIO ARRIBA COUNTY, NEW MEXICO

383' FNL 2527' FWL

