

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

11

1a. Type of Work  
DRILL

1b. Type of Well  
GAS

2. Operator  
**BURLINGTON RESOURCES** Oil & Gas Company

3. Address & Phone No. of Operator  
PO Box 4289, Farmington, NM 87499  
(505) 326-9700

4. Location of Well  
810' FNL, 1720' FEL  
Latitude 36° 53.3, Longitude 107° 44.8

5. Lease Number  
SF-078505  
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name  
Seymour

9. Well Number  
#7B

10. Field, Pool, Wildcat  
Blanco MV/Basin DK

11. Sec., Twn, Rge, Mer. (NMPM)  
Sec. 23, T-31-N, R-9-W  
API # 30-045-30116

12. County  
San Juan

13. State  
NM

14. Distance in Miles from Nearest Town  
15 mi from Aztec

15. Distance from Proposed Location to Nearest Property or Lease Line  
810'

16. Acres in Lease

17. Acres Assigned to Well  
320 E/2 313.63

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease  
600'

19. Proposed Depth  
7870'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
6426' GR

22. Approx. Date Work will Start  
1-12-00

23. Proposed Casing and Cementing Program  
See Operations Plan attached

24. Authorized by: Peggy Case  
Regulatory/Compliance Administrator

DATE 9/28/00

PERMIT NO. \_\_\_\_\_ APPROVAL DATE 9/28/00

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 9/28/00

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.

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 30-045-30116	<sup>2</sup> Pool Code 72319/71599	<sup>3</sup> Pool Name Blanco Mesaverde/Basin Dakota
<sup>4</sup> Property Code 7499	<sup>5</sup> Property Name SEYMOUR	<sup>6</sup> Well Number 7B
<sup>7</sup> OGRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	<sup>9</sup> Elevation 6426'

<sup>10</sup> Surface Location

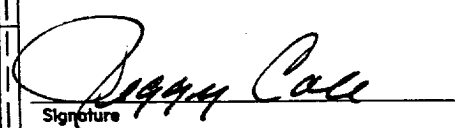

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	23	31-N	9-W		810	NORTH	1720	EAST	SAN JUAN

<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 MV/DK: E/320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

<div>16</div> <div>FD. B.L.M. BC. 1966</div> <div>810'</div> <div>N 89°26'14" W 2773.84' (M)</div> <div>FD. B.L.M. BC. 1966</div> <div>1720'</div> <div>LAT. = 36° 53.3' N. LONG. 107° 44.8' W.</div> <div>SF-078505</div> <div>S 01°17' E</div> <div>23</div> <div>NMNM-03601</div>	<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div> <div></div> <div>Signature Peggy Cole</div> <div>Printed Name Regulatory Administrator</div> <div>Title 1-12-00</div> <div>Date</div>
	<div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div></div> <div>Date of Survey</div> <div>Signature and Seal of Professional Surveyor</div> <div>8894</div> <div>Certificate Number</div>

810' FNL      1720' FEL



## OPERATIONS PLAN

**Well Name:** Seymour #7B  
**Location:** 810' FNL, 1720' FEL, Sec 23, T-31-N, R-9-W  
San Juan County, NM  
Latitude 36° 53.3, Longitude 107° 44.8  
**Formation:** Blanco Mesa Verde/ Basin Dakota  
**Elevation:** 6426' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1981'	
Ojo Alamo	1981'	2071'	aquifer
Kirtland	2071'	2693'	gas
Fruitland	2693'	3278'	gas
Pictured Cliffs	3278'	3407'	gas
Lewis	3407'	3982'	gas
Intermediate TD	3507'		
Mesa Verde	3982'	4351'	gas
Chacra	4351'	5108'	gas
Massive Cliff House	5108'	5168'	gas
Menefee	5168'	5512'	gas
Massive Point Lookout	5512'	5860'	gas
Mancos	5860'	6809'	gas
Gallup	6809'	7532'	gas
Greenhorn	7532'	7578'	gas
Graneros	7578'	7644'	gas
Dakota	7644'		gas
TD (4 1/2" liner)	7870'		

### Logging Program:

Cased hole - IEL-GR, CNL-CDL, CBL-CCL-GR - TD to surface

### Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200- 3507'	LSND	8.4-9.0	30-60	no control
3507- 7870'	Gas	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>Depth Interval</u>	<u>Csq. Size</u>	<u>Wt.</u>	<u>Grade</u>
17 1/2"	0' - 200'	13 3/8"	48#	H-40
10 5/8"	0' - 3507'	8 5/8"	32#	J-55
7 7/8"	3407' - 7870'	5 1/2"	15.5#	J-55

### Tubing Program:

0' - 7870'	1 1/2"	2.90# EUE
0' - 5860'	1 1/2"	2.75# IJ

### 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.

**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 -**

13 3/8" x 8 5/8" x 1 1/2" x 1 1/2" x 5000 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 drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

**Cementing:**

13 3/8" surface casing - cement with 353 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (417 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.

**8 5/8" intermediate casing -**

Lead w/453 sx Class "B" w/3% sodium metasilicate, 5# gilsonite/sx and 1/4# flocele/sx. Tail w/90 sx Class "B" w/2% calcium chloride, 2% sodium metasilicate, 0.25 pps flocele, 5 pps gilsonite (1473 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 during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

8 5/8" intermediate casing alternative two stage: Stage collar at 2593'. First stage: cement with 223 sx Class "B" cmt with 5 pps gilsonite, 1/4 pps flocele, 2% metasilicate, 2% calcium chloride. Second stage: 374 sx Class "B" with 3% sodium metasilicate, 1/4 pps flocele, 5 pps Gilsonite (1473 cu.ft., 100% excess to circulate to surface).

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 2071'. Two turbolating centralizers at the base of the Ojo Alamo at 2071'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

#### 5 1/2" Production Liner -

Cement to cover minimum of 100' of 5 1/2" x 8 5/8" overlap. Lead with 840 sx 50/50 Class "H" Poz with 2% gel, 0.25 flocele/sx, 5# gilsonite/sx, 0.2% retardant and 0.4% fluid loss additive (1083 cu.ft.), 50% excess to cement 5 1/2" x 8 5/8" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint.

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 5 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 5 1/2" x 8 5/8" casing strings. After completion of the well, a 5 1/2" retrievable bridge plug will be set below the top of cement in the 5 1/2" x 8 5/8" overlap. The 5 1/2" casing will then be backed off above the top of cement in the 5 1/2" x 8 5/8" overlap and laid down. The 5 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

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

#### Special Drilling Operations (Gas/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.
- Deduster equipment will be utilized.
- 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 Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	2500 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The east half of Section 23 is dedicated to the Mesaverde and Dakota in this well.
- This gas is dedicated.

  
Drilling Engineer

1/25/50  
Date