

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number NM-03862 Unit Reporting Number 7810009330	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator <b>BURLINGTON RESOURCES</b> Oil & Gas Company	7. Unit Agreement Name San Juan 28-4 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 89499 (505) 326-9700	8. Farm or Lease Name San Juan 28-4 Unit Well Number 27A	
4. Location of Well 1060' FSL, 1560' FEL Latitude 36° 38.5, Longitude 107° 17.3	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) 0 Sec. 19, T-28-N, R-4-W API # 30-039- 26785	
14. Distance in Miles from Nearest Town 15 miles from Gobernador	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1060'	17. Acres Assigned to Well 319.38 S/2	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 1900'	
19. Proposed Depth 8774'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 7382' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u><i>Jenny Carr</i></u> Regulatory/Compliance Supervisor	<u>7-11-01</u> Date	

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY /s/ David J. Mankiewicz TITLE \_\_\_\_\_ DATE SEP 12

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.

NM-03862

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer DD, Artesia, NM 88211-0719

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

<sup>1</sup> API Number 30-039 <i>26785</i>	<sup>2</sup> Pool Code 72319/71599	<sup>3</sup> Pool Name Blanco Mesaverde/Basin Dakota
<sup>4</sup> Property Code 7459	<sup>5</sup> Property Name SAN JUAN 28-4 UNIT	<sup>6</sup> Well Number 27A
<sup>7</sup> GRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	<sup>9</sup> Elevation 7382'

<sup>10</sup> Surface Location

UL or lot no. 0	Section 19	Township 28N	Range 4W	Lot Idn	Feet from the 1060	North/South line SOUTH	Feet from the 1560	East/West line EAST	County RIO ARRIBA
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<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 DK 319.38/S2 MV 319.38/S2									
<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<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

<sup>16</sup> 1313.40'	1320.00'	2640.00'	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  <i>Peggy Cole</i> Signature Peggy Cole Printed Name Regulatory Supervisor Title 7-11-01 Date
LOT 1			
LOT 2			
5280.00'	19	5280.00'	
LOT 3	USA NM-03962		
LOT 4			
1308.78'	1320.00'	2640.00'	<sup>18</sup> 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.  JULY 27, 2000 Date of Survey Signature and Seal of Surveyor <i>Neale C. Edwards</i> NEALE C. EDWARDS NEW MEXICO 6857 Certificate Number 6857



## OPERATIONS PLAN

**Well Name:** San Juan 28-4 Unit #27A  
**Location:** 1060' FSL, 1560' FEL, Sec 19, T-28-N, R-4-W  
Rio Arriba County, NM  
Latitude 36° 38.5, Longitude 107° 17.3  
**Formation:** Blanco Mesaverde/Basin Dakota  
**Elevation:** 7382' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3684'	
Ojo Alamo	3684'	3874'	aquifer
Kirtland	3874'	3954'	gas
Fruitland	3954'	4334'	gas
Pictured Cliffs	4334'	4449'	gas
Lewis	4449'	4974'	gas
Intermediate TD	4549'		
Mesa Verde	4974'	5324'	gas
Chacra	5324'	6139'	gas
Massive Cliff House	6139'	6189'	gas
Menefee	6189'	6504'	gas
Massive Point Lookout	6504'	7064'	gas
Mancos	7064'	7704'	gas
Gallup	7704'	8454'	gas
Greenhorn	8454'	8504'	gas
Graneros	8504'	8569'	gas
Dakota	8569'		gas
TD	8774'		

### Logging Program:

Mud logs - none  
Open hole - ARI, CNL-CDL - TD to 4549'  
Cased hole - CBL-CCL-GR - TD to surface  
Cores - none

### Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 300'	Spud	8.4-9.0	40-50	no control
300- 4549'	LSND	8.4-9.0	30-60	no control
4549- 8774'	Air/N2	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>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 300'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 4549'	7"	20.0#	J-55
6 1/4"	4449' - 8774'	4 1/2"	10.5#	K-55

### Tubing Program:

0' - 8774'      2 3/8"      4.7#      J-55

### BOP Specifications, Wellhead and Tests:

#### Surface to Intermediate TD -

11" 3000 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" 3000 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, 3000 psi minimum choke manifold (Reference Figure #2).

**Completion Operations -**

7 1/16" 3000 psi double gate BOP stack (Reference Figure #3). 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 3000 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:**

9 5/8" surface casing - cement with 239 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (282 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/485 sx 50/50 Class "G" TXI Liteweight cement with 2% calcium chloride, 2.5% sodium metasilicate, 10 pps Gilsonite and 0.5 pps Celloflake. Tail w/90 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite, 0.25 pps Celloflake (1367 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.

See attached alternative intermediate lead slurry.

7" intermediate casing alternative two stage: Stage collar 3854'. First stage: cement with w/163 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps gilsonite, 0.25 pps Celloflake. Second stage: 449 sx 50/50 Class "G"/TXI Liteweight with 2% calcium chloride, 2.5% sodium metasilicate, 10 pps Gilsonite, 0.25 pps Celloflake (1367 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 3874'. Two turbolating centralizers at the base of the Ojo Alamo at 3874'. 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 cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 431 sx 50/50 Class "G" Poz with 5% gel, 0.25 pps Celloflake, 5 pps Gilsonite (621 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

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