

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	01 JAN -3 00 10:59	5. Lease Number Jicarilla Contract 150 Unit Reporting Number
1b. Type of Well GAS		If Indian, All. or Tribe Jicarilla Apache
2. Operator <b>BURLINGTON RESOURCES</b> Oil & Gas Company		Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499  (505) 326-9700		8. Farm or Lease Name Jicarilla 150 9. Well Number 5B
4. Location of Well 1225' FNL, 1120' FWL  Latitude 36° 30.3, Longitude 107° 18.9		10. Field, Pool, Wildcat Blanco Mesaverde 11. Sec., Twn, Rge, Mer. (NMPM) D Sec. 12, T-26-N, R-5-W API # 30-039- 26701
14. Distance in Miles from Nearest Town 89 miles to Blanco		12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1120'		
16. Acres in Lease		17. Acres Assigned to Well 320 W/2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 984'		
19. Proposed Depth 6426'		20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 7194' GR		22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Deanna C. Allen</u> Regulatory/Compliance Supervisor		<u>12-21-00</u> Date

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY S.W. Anderson TITLE Asst Field Manager DATE 3-6-01

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

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

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. 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 30-039-26701	<sup>2</sup> Pool Code 72319	<sup>3</sup> Pool Name Blanco Mesaverde
<sup>4</sup> Property Code 16344	<sup>5</sup> Property Name JICARILLA 150	<sup>6</sup> Well Number 5B
<sup>7</sup> OGRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS INC.	<sup>9</sup> Elevation 7194 -

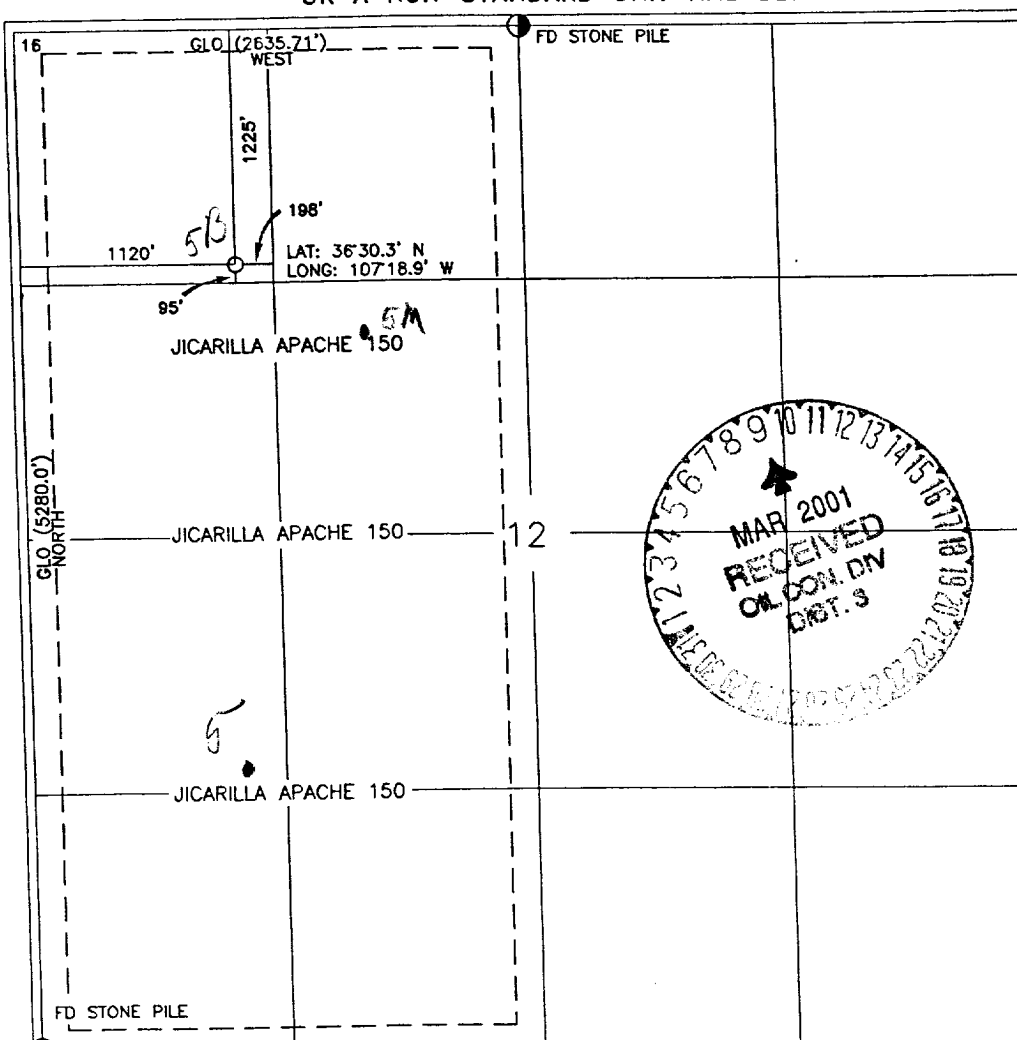
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	12	26-N	5-W		1225	NORTH	1120	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 MV-W/320					<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>17</sup> 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 Supervisor  
Title  
12-21-00  
Date

<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 knowledge and belief

8-17-00  
Date of Survey  
Signature and Seal of Professional Surveyor  
8894  
Certificate Number

1000' NEW JICARILLA APACHE CONSTRUCTION  
200' NW/NW SECTION 12, T26N, R5W  
800' SW/NW SECTION 12, T26N, R5W

## OPERATIONS PLAN

Well Name: Jicarilla 150 #5B  
Location: 1225' FNL, 1120' FWL, Section 12, T-26-N, R-5-W  
Rio Arriba County, New Mexico  
Latitude 36° 30.3, Longitude 107° 18.9  
Formation: Blanco Mesa Verde  
Elevation: 7194' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3286'	H <sub>2</sub> O
Ojo Alamo	3286'	3496'	aquifer
Kirtland	3496'	3571'	
Fruitland	3571'	3876'	gas
Pictured Cliffs	3876'	3941'	gas
Lewis	3941'	4341'	gas
Intermediate TD	4191'		
Huerfanito Bentonite	4341'	4801'	gas
Chacra	4801'	5511'	gas
Massive Cliff House	5511'	5641'	gas
Menefee	5641'	6026'	gas
Point Lookout	6026'		gas
Total Depth	6426'		

Nacimanto ~1780' needs to be isolated (cement to surface) cover at ABO

### Logging Program:

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

### Mud Program:

<u>Interval- MD</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- 4191'	LSND	8.4-9.0	30-60	no control
4191- 6426'	Air/Mist/N2*	n/a	n/a	n/a

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

\*Nitrogen might be used in conjunction with or instead of air to prevent a down hole fire.

### 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' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 4191'	7"	20.0#	J-55
6 1/4"	4091' - 6426'	4 1/2"	10.5#	J-55

Tubing Program: 0' - 6426' 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.

#### 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 159 sx Class "H" cement with 1/4# flocele/sx and 3% calcium chloride (188 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/444 sx 50/50 Class "G"/Trinity Light w/2.5% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 0.5# flocele/sx. Tail w/90 sx 50/50 Class "G" Poz w/2% gel, 2% calcium chloride, 5# gilsonite/sx, 0.1% antifoam and 0.25# flocele/sx (1261 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.

See attached alternative intermediate lead slurry.

7" intermediate casing alternative two stage: Stage collar at 3471'. First stage: cement with 169 sx Class "G" 50/50 poz w/2% gel, 5 pps Gilsonite, 2% calcium chloride, 0.25 pps Flocele, 0.1% antifoam. Second stage: 405 sx Class "G"/Trinity Light with 2.5% sodium metasilicate, 2% calcium chloride, 1/2 pps Flocele, 10 pps Gilsonite (1261 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 3496'. Two turbolating centralizers at the base of the Ojo Alamo at 3496'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

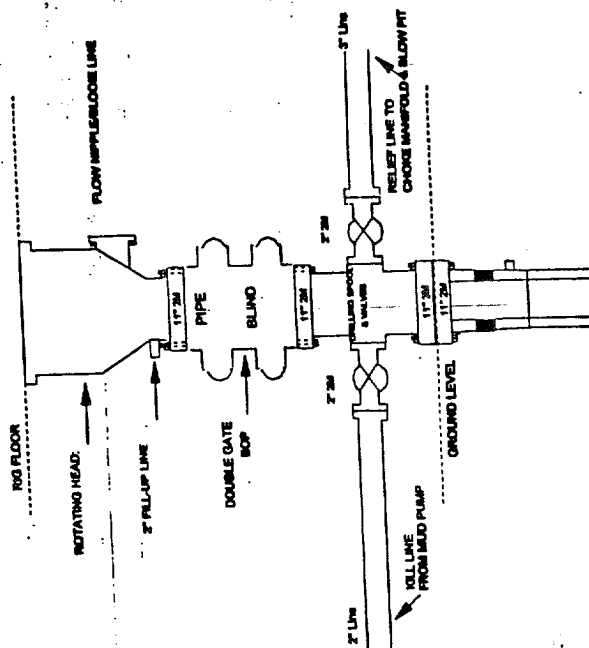
**4 1/2" Production Liner -**

Cement to circulate liner top. Pump 233 sx 50/50 Class "G" Poz w/1/4# flocele/sx, 4.5% gel, 0.1% retardant, 5# gilsonite/sx, 0.25% fluid loss additive (336 cu.ft., 40% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

# Burlington Resources

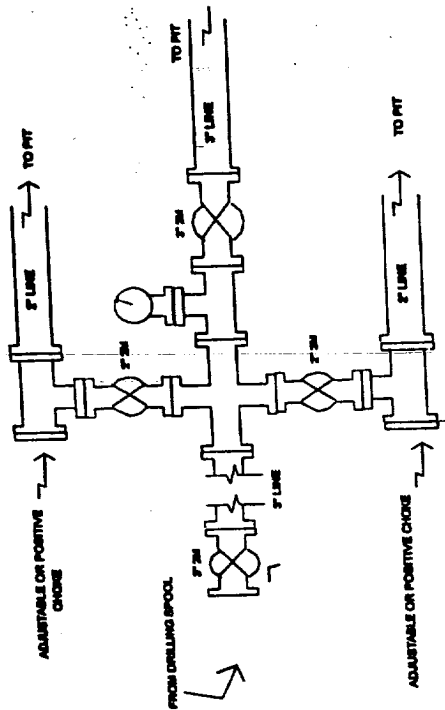
## Drilling Rig 2000 psi System



BOP installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal. 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A rotating head on top of ram preventer. All BOP equipment is 2,000 psi working pressure or greater.

Figure #1

# Drilling Rig Choke Manifold Configuration 2000 psi System

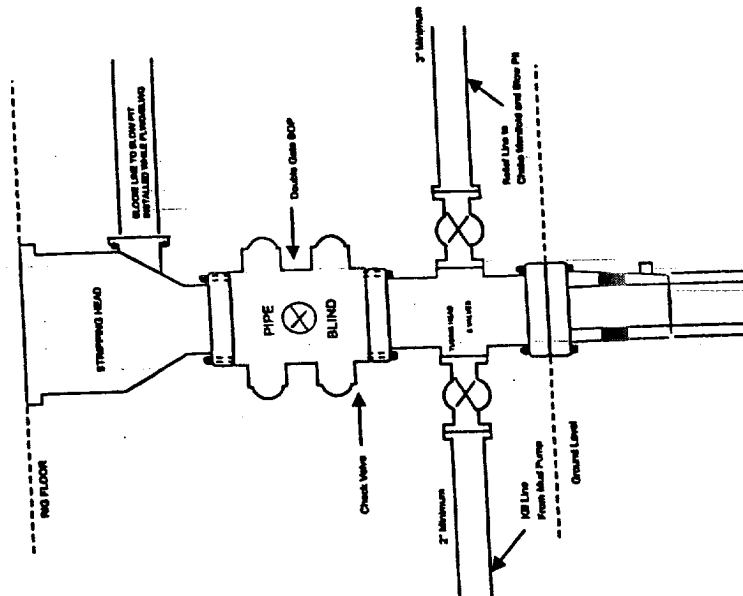


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

## BURLINGTON RESOURCES

### Completion/Workover Rig BOP Configuration 2,000 psi System



Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All equipment is 2000 psi working pressure or greater.

Figure #2