

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 SF-079392 Unit Reporting Number 891000950	
1b. Type of Well GAS -	6. If Indian, All. or Tribe	
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 27-5 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 27-5 Unit 9. Well Number 123F -	
4. Location of Well 800' FSL, 2265' FEL Latitude 36° 34.1, Longitude 107° 22.8	10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) <input checked="" type="radio"/> Sec. 17, T-27-N, R-5-W API # 30-039- 26 595	
14. Distance in Miles from Nearest Town 11 miles from Gobernador	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 800'		
16. Acres in Lease	17. Acres Assigned to Well 330.33 S/2	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1300'		
19. Proposed Depth 7658' -	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6441' GR -	22. Approx. Date Work will Start DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u><i>James C. Call</i></u> Regulatory/Compliance Supervisor	Date <u>10-23-00</u>	

PERMIT NO. _____ APPROVAL DATE 6/1/01

APPROVED BY *1st Ind. E. Powell* TITLE Acting FM DATE 6/1/01

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.

NMOCD

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

*API Number 30-039- 26595		*Pool Code 71599	*Pool Name Basin Dakota
*Property Code 7454	*Property Name SAN JUAN 27-5 UNIT		*Well Number 123F
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 6441

10 Surface Location

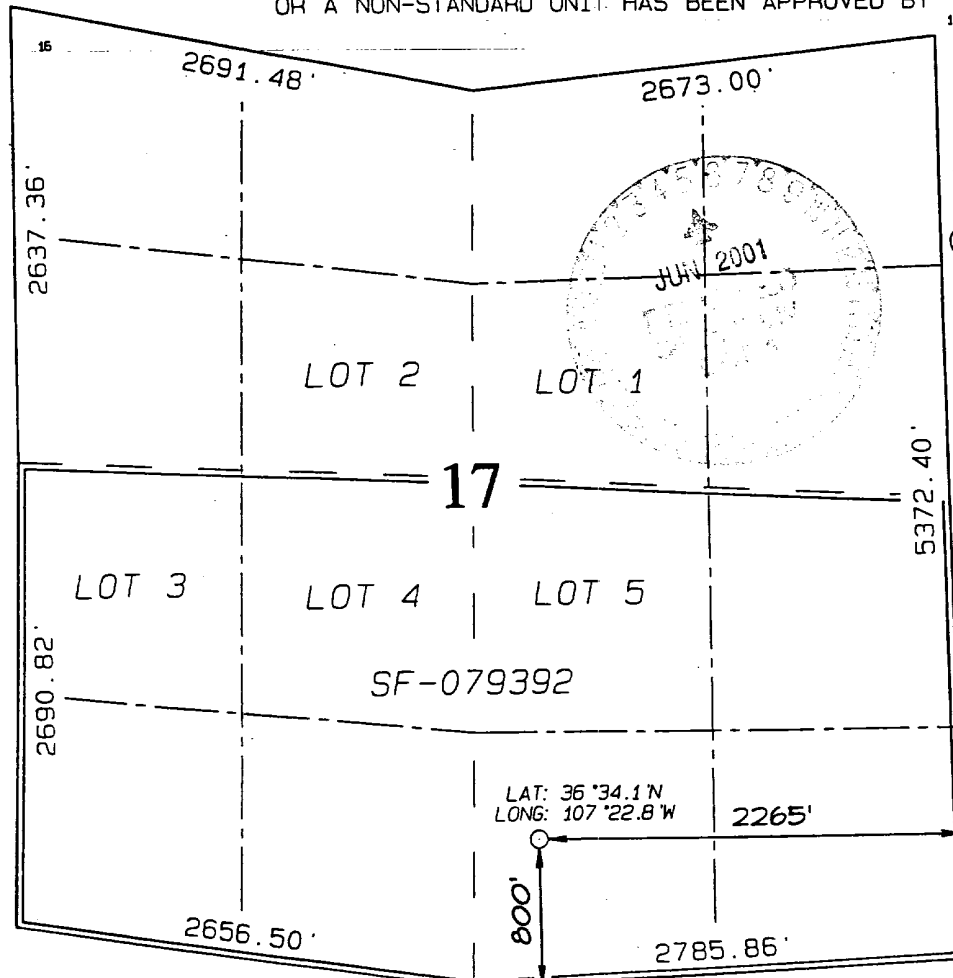
UL or lot no. 0	Section 17	Township 27N	Range 5W	Lot Idn	Feet from the 800	North/South line SOUTH	Feet from the 2265	East/West line EAST	County RIO ARriba
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres DK-S/330.33	13 Joint or Infill	14 Consolidation Code	15 Order No. R-11503
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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



OPERATOR CERTIFICATION

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

Signature
Peggy Cole

Printed Name
Regulatory Supervisor

Title
10-23-00

Date

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.

SEPTEMBER 20, 2000

Date of Survey

Signature and Seal of Surveyor

NEALE G. EDWARDS
NEW MEXICO
6857
Certificate No. 6857

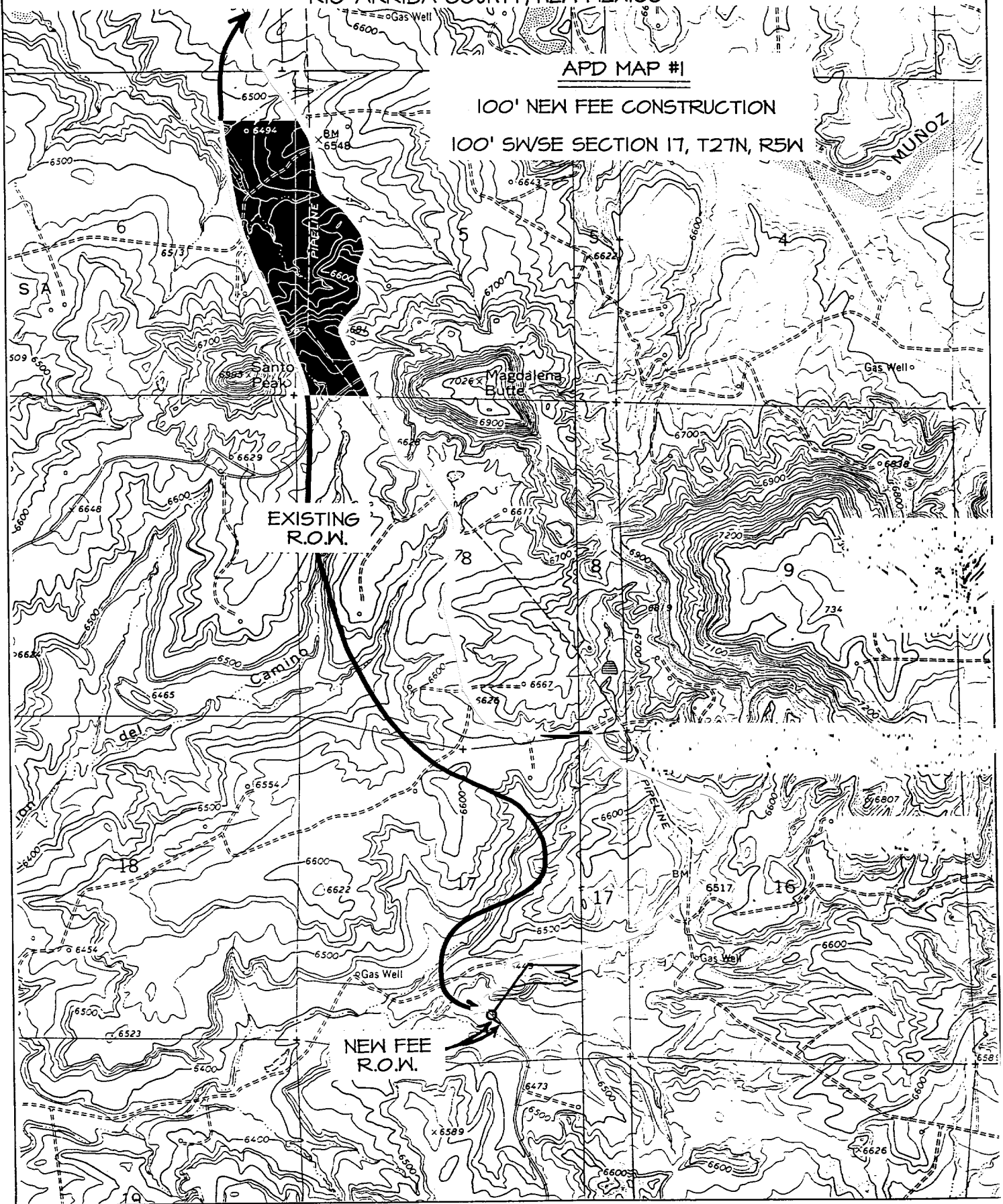
BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 27-5 UNIT #123F

800' FSL & 2265' FEL, SECTION 17, T27N, R5W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO

APD MAP #1

100' NEW FEE CONSTRUCTION

100' SWSE SECTION 17, T27N, R5W



OPERATIONS PLAN

Well Name: San Juan 27-5 Unit #123F
Location: 800' FSL, 2265' FEL, Sec 17, T-27-N, R-5-W
Rio Arriba County, NM
Latitude 36° 34.1, Longitude 107° 22.8
Formation: Basin Dakota
Elevation: 6441' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2552'	
Ojo Alamo	2552'	2717'	aquifer
Kirtland	2717'	2790'	gas
Fruitland	2790'	3232'	gas
Pictured Cliffs	3232'	3316'	gas
Lewis	3316'	3698'	gas
Intermediate TD	3416'		
Mesa Verde	3698'	4173'	gas
Chacra	4173'	4874'	gas
Massive Cliff House	4874'	5008'	gas
Menefee	5008'	5378'	gas
Massive Point Lookout	5378'	5869'	gas
Mancos	5869'	6820'	gas
Gallup	6820'	7316'	gas
Greenhorn	7316'	7403'	gas
Dakota	7403'		gas
TD	7658'		

Logging Program:

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- 200'	Spud	8.4-9.0	40-50	no control
200- 3416'	LSND	8.4-9.0	30-60	no control
3416- 7658'	Air/Mist/N2*	n/a	n/a	n/a

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

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' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3416'	7"	20.0#	J-55
6 1/4"	3316' - 7658'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 7658' 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 159 sx Class "B" 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/309 sx Class "G" cement 3% sodium metasilicate, 2% calcium chloride, 10 pps Gilsonite and 0.5 pps flocele. Tail w/90 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite, 0.25 pps Flocele (1028 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.

7" intermediate casing alternative two stage: Stage collar at 2690'. First stage: cement with w/171 sx 50/50 Class "G" poz w/2% calcium chloride, 2% gel, 5 pps gilsonite, 0.25 pps Flocele. Second stage: 274 sx Class "G" with 3% sodium metasilicate, 2% calcium chloride, 10 pps Gilsonite, 0.5 pps Flocele (1028 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 3020'. Two turbolating centralizers at the base of the Ojo Alamo at 3020'. 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 433 sx 50/50 Class "G" Poz with 5% gel, 0.25 pps flocele, 5 pps Gilsonite 0.1% retardant and 0.25% fluid loss additive (624 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 shoe joint.

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

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The 4 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.

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:

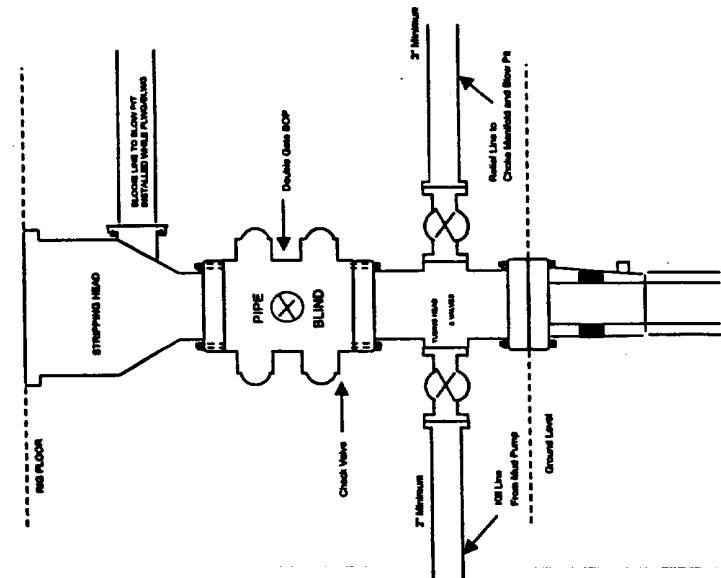
- The Dakota formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

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 south half of Section 17 is dedicated to the Dakota in this well.
- This gas is dedicated.

John P. Hasford
Drilling Engineer

10/24/00
Date

Completion/Workover Rig
BOP Configuration
3,000 psi System

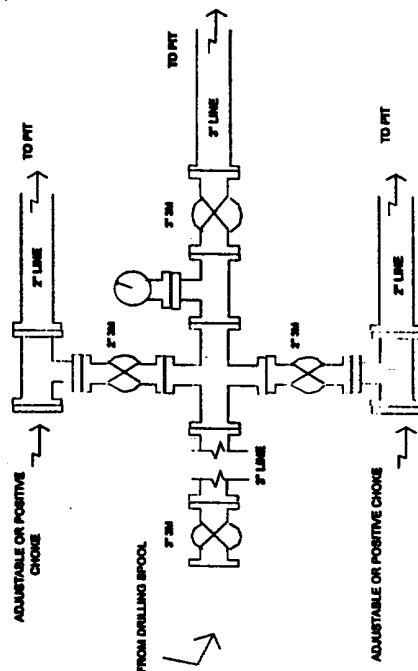


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 3000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All equipment is 3000 psi working pressure or greater.

Figure #3

BURLINGTON RESOURCES

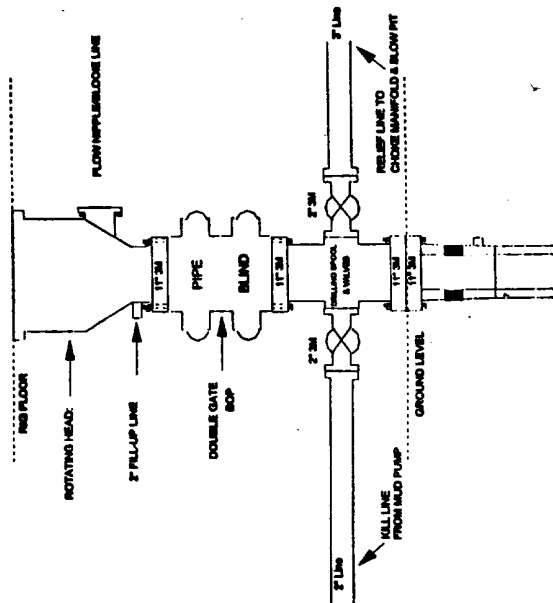
Drilling Rig
Choke Manifold Configuration
3000 psi System



Choke manifold Installation from Surface Casing Point to Total Depth. 3,000psi working pressure equipment with two chokes.

Figure #2

Drilling Rig
3000 psi System



BOP Installation from Surface Casing Point to Total Depth. 11\"/>

Figure #1