

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

1a. Type of Work DRILL	5. Lease Number SF-078399
1b. Type of Well GAS	Unit Reporting Number 070 FARMINGTON, NM
2. Operator <b>BURLINGTON</b> RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 29-7 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 29-7 Unit
4. Location of Well 1560' FSL, 2385' FEL Latitude 36° 44.2363'N, Longitude 107° 33.4092'W	9. Well Number #63C
10. Field, Pool, Wildcat Blanco Mesaverde, Basin Dakota	11. Sec., Twn, Rge, Mer. (NMPM) Sec. 10, T29N, R07W API # 30-045- 039 27710
14. Distance in Miles from Nearest Town 24.9 miles to Blanco, NM Post Office	12. County Rio Arriba
15. Distance from Proposed Location to Nearest Property or Lease Line 1560'	13. State NM
16. Acres in Lease	17. Acres Assigned to Well DK 320 E/2 MV 320 E/2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 1053'	20. Rotary or Cable Tools Rotary
19. Proposed Depth 7614'	22. Approx. Date Work will Start
21. Elevations (DF, FT, GR, Etc.) 6292' GR	
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Doni Clark</u> Regulatory Specialist	<u>2-9-06</u> Date

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY D. Mantecón TITLE AFM DATE 7-16-04

Archaeological Report attached

Threatened and Endangered Species Report attached

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.

NO HPA NOTIFICATION REQUIRED UNDER ORDER R-8768F.

✓ DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

NMOCD

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

DISTRICT II  
811 South First, Artesia, N.M. 88210DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

## OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039- <b>27710</b>		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 7465	*Property Name SAN JUAN 29-7 UNIT		*Well Number 63C
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		*Elevation 6292'

## 10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	10	29-N	7-W		1560'	SOUTH	2385'	EAST	RIO ARRIBA

## 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

*Dedicated Acres DK E/2 320 MV E/2 320	*Joint or Infill	*Consolidation Code	*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

16 RECEIVED 2004 APR 27 PM 3:38 OIL CONSERVATION DIV. DIST. 3	USA SF-078424	
	JUL 2004 RECEIVED OIL CONSERV. DIV. DIST. 3	
	10 USA SF-078399	N 00-02-55 W 2636.79'
	LAT: 36°44.2363' N LONG: 107°33.4092' W NAD 1927	2385'
PREHN FEE		N 89-54-13 W 2644.42'

## 17 OPERATOR CERTIFICATION

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

Signature

Joni Clark

Printed Name

Regulatory Specialist

Title

2-9-04

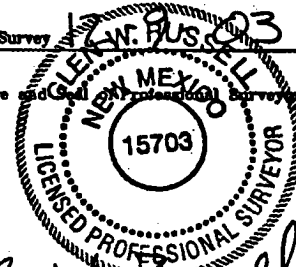
Date

## 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.

Date of Survey

Signature and Seal of Licensed Professional Surveyor



Certificate Number

15703

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
March 4, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. 30-045-
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. SF-078399
7. Lease Name or Unit Agreement Name San Juan 29-7 Unit
8. Well Number #63C
9. OGRID Number 14538
10. Pool name or Wildcat Blanco Mesaverde/Basin Dakota

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator Burlington Resources Oil & Gas Company LP	
3. Address of Operator 3401 E. 30 <sup>th</sup> Street, Farmington, NM 87402	
4. Well Location Unit Letter <u>J</u> : <u>1560</u> feet from the <u>South</u> line and <u>2385</u> feet from the <u>East</u> line Section <u>10</u> Township <u>29N</u> Range <u>7W</u> NMPM Rio Arriba County, NM	
11. Elevation (Show whether DR, RKB, RT, GR, etc.)	
Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)	
Pit Location: UL <u>      </u> Sect <u>      </u> Twp <u>      </u> Rng <u>      </u> Pit type <u>      </u> Depth to Groundwater <u>&gt;100'</u> Distance from nearest fresh water well <u>&gt;1000'</u> Distance from nearest surface water <u>&gt;1000'</u> Below-grade Tank Location UL <u>      </u> Sect <u>      </u> Twp <u>      </u> Rng <u>      </u> ; feet from the <u>      </u> line and <u>      </u> feet from the <u>      </u> line	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data  
**NOTICE OF INTENTION TO:**

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: Construct Workover Pit ☒

**SUBSEQUENT REPORT OF:**

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Burlington Resources proposes to construct a workover pit. The workover pit will be an unlined pit as detailed in Burlington's general pit construction plan dated April 26, 2004 on file at the NMOCD office.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐ a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

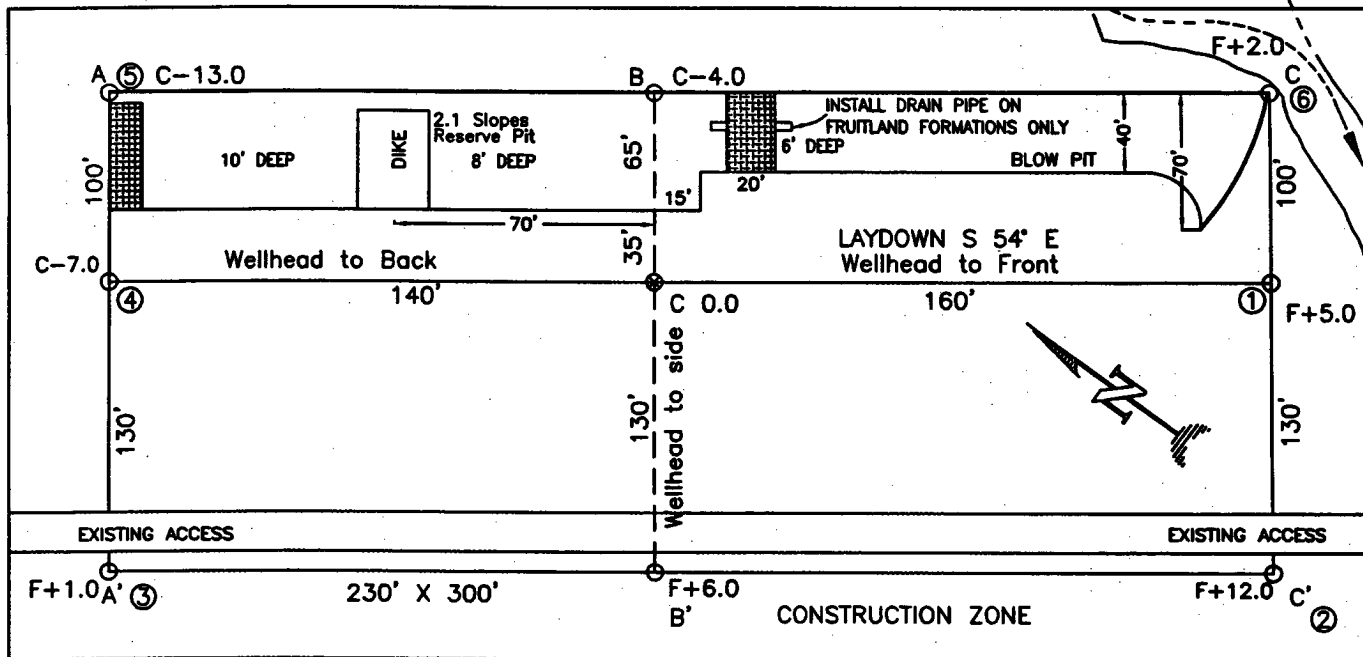
SIGNATURE Dottie L. Busse TITLE Regulatory Specialist DATE 4/26/04

Type or print name Dottie Busse E-mail address: dbusse@br-inc.com Telephone No. 326-9700

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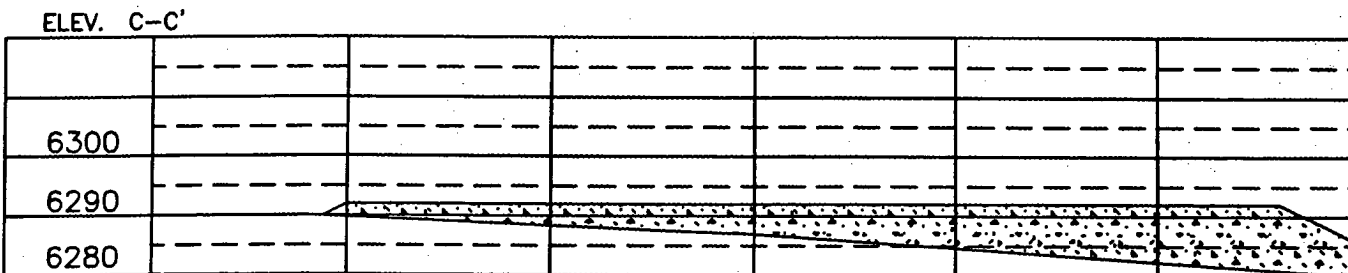
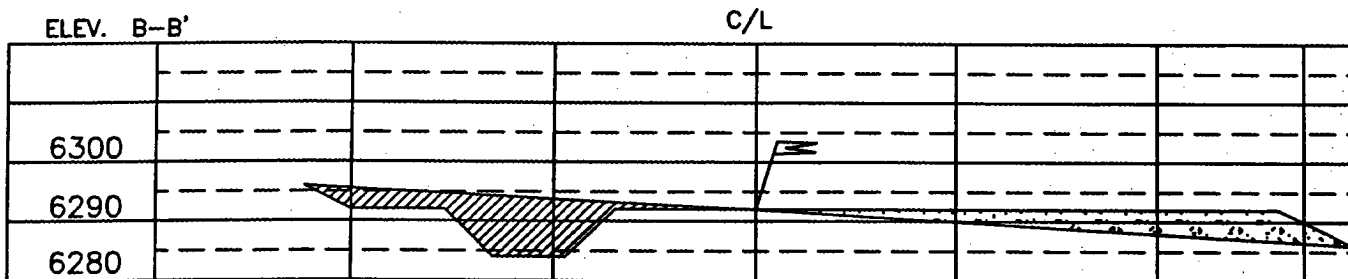
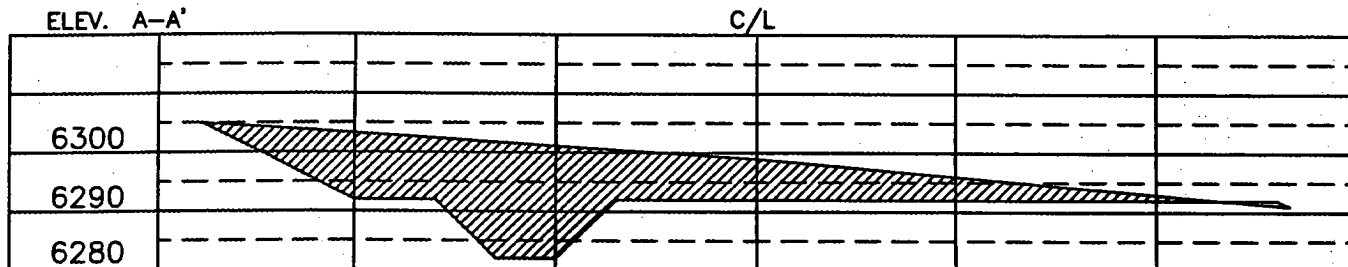
APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #8 DATE JUL 23 2004  
Conditions of approval, if any:

**BURLINGTON RESOURCES OIL & GAS COMPANY LP**  
**SAN JUAN 29-7 UNIT #63C, 1560' FSL & 2385' FEL**  
**SECTION 10, T-29-N, R-7W, NMPM, RIO ARriba COUNTY, NM**  
**GROUND ELEVATION: 6292', DATE: NOVEMBER 24, 2003**



(330' X 400') = 3.03 ACRES

RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.



NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.  
 CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES  
 ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

# OPERATIONS PLAN

Well Name: San Juan 29-7 Unit #63C  
Location: 1560' FSL, 2385' FEL, Section 10, T-29-N, R-7-W  
Rio Arriba County, New Mexico  
Latitude 36° 44.24, Longitude 107° 33.41  
Formation: Blanco Mesa Verde/Basin Dakota  
Elevation: 6292' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2139'	
Ojo Alamo	2139'	2329'	aquifer
Kirtland	2329'	2884'	gas
Fruitland	2884'	3124'	
Pictured Cliffs	3124'	3319'	gas
Lewis	3319'	3864'	gas
Intermediate TD	3419'		
Huerfano Bentonite	3864'	4109'	gas
Chacra	4109'	4679'	gas
Upper Cliff House	4679'	4874'	
Massive Cliff House	4874'	4994'	
Menefee	4994'	5314'	gas
Point Lookout	5314'	5714'	gas
Mancos	5714'	6979'	gas
Gallup	6979'	7287'	gas
Greenhorn	7287'	7339'	gas
Graneros	7339'	7387'	gas
Dakota	7387'	7492'	gas
Upper Cubero	7492'	7519'	
Lower Cubero	7519'	7606'	
Oak Canyon	7606'		
TD	7614'		

## Logging Program:

Mud Logs/Coring/DST -  
Mud logs - none  
Coring - none  
DST - none  
Open hole - none  
Cased hole - Gamma Ray, CCL, CBL - surface to TD

## Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud MUD/Air/Air Mist	8.4-9.0	40-50	no control
120- 3419'	LSND	8.4-9.0	30-60	no control
3419- 6322'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

## 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' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3419'	7"	20.0#	J-55
6 1/4"	0' - 7614'	4 1/2"	10.5#	J-55

Tubing Program: 0' - 7614' 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 4 1/2" 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 -

Pre-Set Drilled Cement with 23 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (37 cu ft of slurry, bring cement to surface) Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.

9 5/8" surface casing conventionally drilled -

Cement with 88 sacks Type III cement with 0.25 pps Celloflake, 3% calcium chloride. (113 cu.ft.-200% excess, bring cement to surface). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60 degrees F. prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

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

7" intermediate casing -

Lead with 301 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (765 cu ft- 50% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

- 7" intermediate casing alternative two stage: Stage collar set 300' above the top of the Fruitland. First stage: Lead w/30 sxs Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% sodium metascilicate, 0.4% fluid loss. Tail w/90 Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: Cmt w/271 sxs Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (765 cu ft-50% 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 @ 2329'. Two turbolating centralizers at the base of the Ojo Alamo 2329'. 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/Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 289 sacks Premium Lite HS w/ 0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52. (571 cu. ft.-30% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float collar stacked on top of float shoe.

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

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 air/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 and Dakota 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 below the top of the Pictured Cliffs.
- The west half of Section 10 is dedicated to the Mesa Verde and Dakota.
- This gas is dedicated.

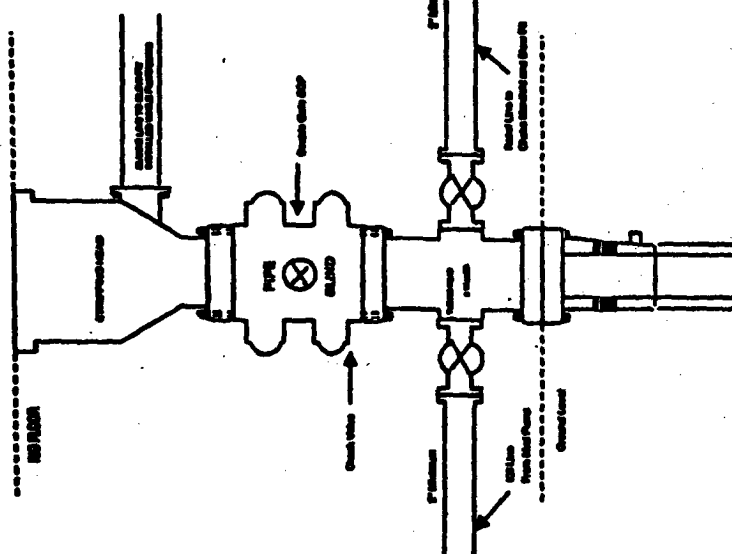
Sean Corrigan  
Drilling Engineer

February 25, 2004  
Date

# BURLINGTON RESOURCES

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

### Drilling Rig 2000 psi System

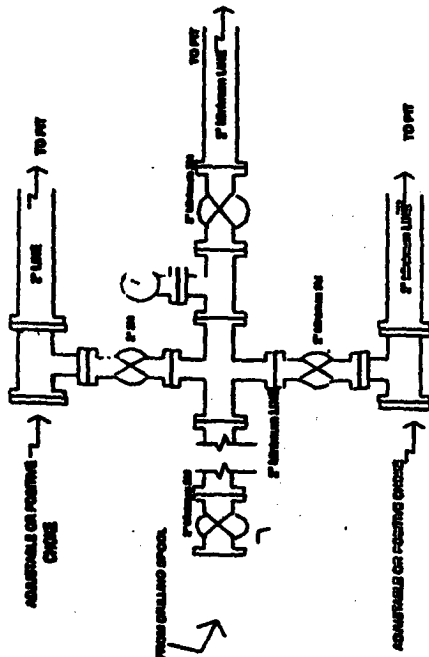


BOP Installation from Surface Casing Point to Total Depth. 11" Bore 11" Minimum, 2000 psi working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment to 2000 psi working pressure.

Figure #1

4-20-01

### 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

4-20-01

Figure #2

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 BOP equipment to 2000 psi working pressure or greater excluding 600 psi stripping head.