

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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  
1410' FNL, 255' FWL  
Latitude 36° 27.7528'N, Longitude 107° 52.3976'W

5. Lease Number  
SF-078001-B  
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name  
Huerfano Unit

8. Farm or Lease Name  
Huerfano Unit

9. Well Number  
#127F

10. Field, Pool, Wildcat  
Basin Dakota

11. Sec., Twn, Rge, Mer. (NMPM)  
Sec. 26, T26N, R10W  
API # 30-045-32720

12. County  
San Juan

13. State  
NM

14. Distance in Miles from Nearest Town  
18.6 miles intersection Hwy 550 & 64

15. Distance from Proposed Location to Nearest Property or Lease Line  
255'

16. Acres in Lease

17. Acres Assigned to Well  
DK 320 W/2

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease  
1500'

19. Proposed Depth  
6926'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
6684' 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: Joni Clark  
Regulatory Specialist

Date 11-15-04

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY Joni Clark

TITLE Acting Field Manager DATE 12/29/04

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.

NMOCD

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

DISTRICT II  
811 South First, Artesia, N.M. 88210

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

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 30-045-32720	<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name Basin Dakota
<sup>4</sup> Property Code 7139	<sup>5</sup> Property Name HUERFANO UNIT	<sup>6</sup> Well Number 127F
<sup>7</sup> OGRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	<sup>9</sup> Elevation 6684'

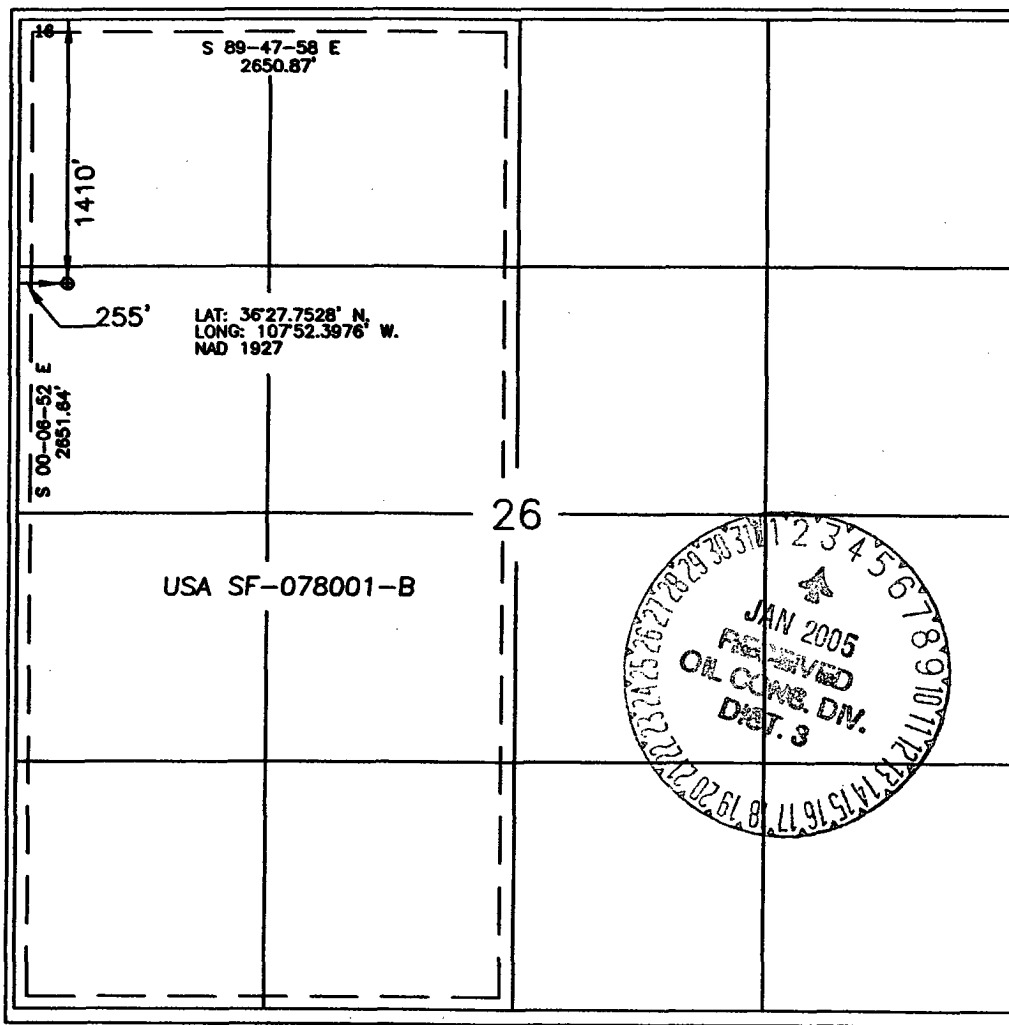
<sup>10</sup> Surface Location

UL or lot no. E	Section 26	Township 26-N	Range 10-W	Lot Idn	Feet from the 1410'	North/South line NORTH	Feet from the 255'	East/West line WEST	County SAN JUAN
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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 W/2 320 acres					<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

*Joni Clark*  
Signature

Joni Clark  
Printed Name

Regulatory Specialist  
Title

11-9-04  
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 belief.

Date of Survey 10-12-04

Signature and Seal of Professional Surveyor

GLEN W. RUSSELL  
NEW MEXICO  
15703  
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

## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-103

March 4, 2004

WELL API NO.

30-045-

5. Indicate Type of Lease

STATE ☐

FEE ☐

6. State Oil & Gas Lease No.

SF-078001-B

7. Lease Name or Unit Agreement Name

Huerfano Unit

8. Well Number

127F

9. OGRID Number

14538

10. Pool name or Wildcat

Basin Dakota

SUNDRIY NOTICES AND REPORTS ON WELLS  
(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 ☐

Gas Well ☒

Other

2. Name of Operator

BURLINGTON RESOURCES OIL & GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter E : 1410 feet from the North line and 255 feet from the West line

Section 26

Township 26N

Range 10W

NMPM

County San Juan, 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 A Sect 26 Twp 26N Rng 10W Pit type Workover Depth to Groundwater >100 Distance from nearest fresh water well >1000'

Distance from nearest surface water >1000' Below-grade Tank Location UL        Sect        Twp        Rng        ;

       feet from the        line and        feet from the        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:

New Drill ☒

#### 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 new drilling pit and an associated blow/flare pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and blow/flare pit will be an unlined pit as detailed in Burlington's Revised Drilling / Workover Pit Construction / Operation Procedures dated November 11, 2004 on file at the NMOCD office. A portion of the blow/flare pit will be designed to manage fluids, and that portion will be unlined, as per the risk ranking criteria. Burlington Resources anticipates closing these pits according to the Drilling / Workover Pit Closure Procedure dated August 2, 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

*Joni Clark*

TITLE Sr. Regulatory Specialist

DATE 11/15/2004

Type or print name

Joni Clark

E-mail address: jclark@br-inc.com

Telephone No. 326-9700

(This space for State use)

APPROVED BY

*[Signature]*

TITLE

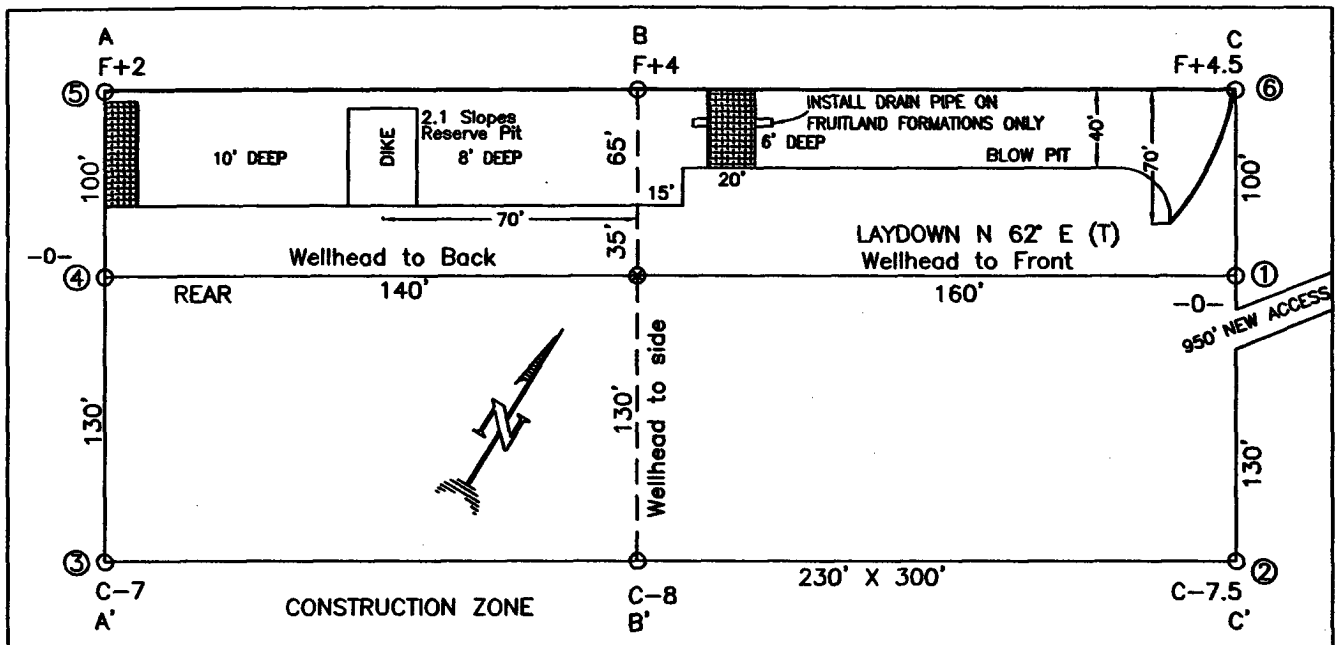
DEPUTY OIL & GAS INSPECTOR, DIST. #3

DATE

JAN - 3 2005

Conditions of approval, if any:

BURLINGTON RESOURCES OIL & GAS COMPANY LP  
 HUERFANO UNIT 127F, 1410' FNL & 255' FWL  
 SECTION 26, T-26-N, R-10-W, NMPM, SAN JUAN COUNTY, NM  
 GROUND ELEVATION: 6684', DATE: OCTOBER 6, 2004



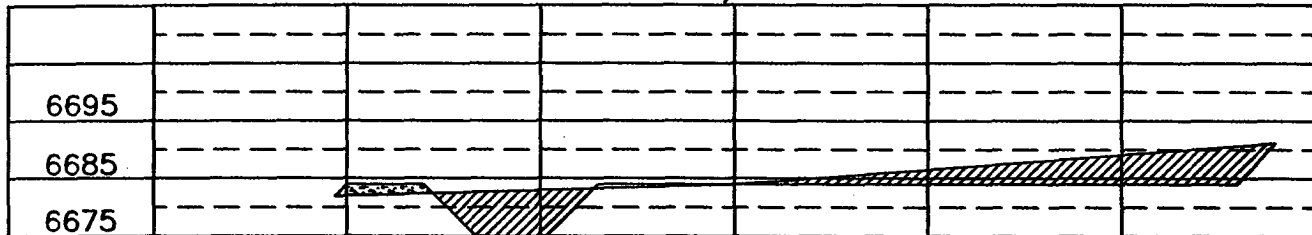
(330' X 400') = 3.03 ACRES

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.

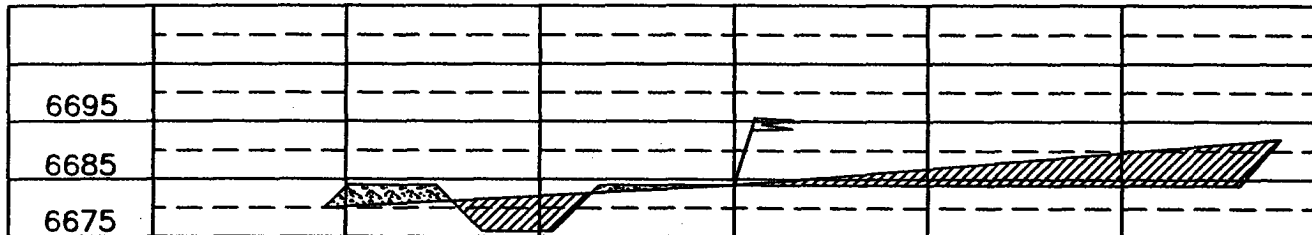
ELEV. A-A'

C/L



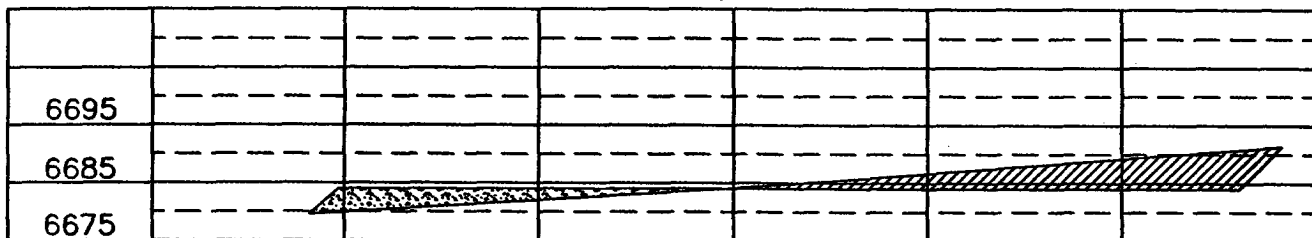
ELEV. B-B'

C/L



ELEV. C-C'

C/L



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:** Huerfano Unit #127F  
**Location:** 1410' FNL, 255' FWL, Section 26, T-26-N, R-10-W  
San Juan County, New Mexico  
Latitude 36° 27.75', Longitude 107° 52.40'  
**Formation:** Basin Dakota  
**Elevation:** 6684' GL

<b><u>Formation Tops:</u></b>	<b><u>Top</u></b>	<b><u>Bottom</u></b>	<b><u>Contents</u></b>
Surface	San Jose	1196'	
Ojo Alamo	1196'	1323'	aquifer
Kirtland	1323'	2033'	gas
Fruitland	2033'	2151'	
Pictured Cliffs	2151'	2316'	gas
Lewis	2316'	2526'	gas
Huerfanito Bentonite	2526'	3036'	gas
Chacra	3036'	3696'	gas
Cliff House	3696'	3731'	
Menefee	3731'	4536'	gas
Point Lookout	4536'	4838'	gas
Mancos	4838'	5593'	gas
Gallup	5593'	6523'	gas
Greenhorn	6523'	6578'	gas
Graneros	6578'	6629'	gas
Two Wells	6629'	6681'	
Paguate	6681'	6750'	
Cubero	6750'	6797'	
Encinal	6797'	6886'	
Morrison	6886'		gas
TD	6926'		

### **Logging Program:**

Mud Logs/Coring/DST -

Mud logs - From 6423' to TD

Coring - none

DST - none

Open hole - none

Cased hole - Gamma Ray - surface to TD

### **Mud Program:**

<b><u>Interval</u></b>	<b><u>Type</u></b>	<b><u>Weight</u></b>	<b><u>Vis.</u></b>	<b><u>Fluid Loss</u></b>
0- 300'	Spud MUD/Air/Air Mist	8.4-9.0	40-50	no control
300'- 6926'	LSND	8.4-9.0	30-60	no control

### **Casing Program (as listed, the equivalent, or better):**

<b><u>Hole Size</u></b>	<b><u>Depth Interval</u></b>	<b><u>Csg.Size</u></b>	<b><u>Wt.</u></b>	<b><u>Grade</u></b>
12 1/4"	0' - 300'	8 5/8"	32.3#	J-55
7 7/8"	0' - 6926'	4 1/2"	10.5#	J-55

**Tubing Program:** 0' - 6926' 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 -**

8 5/8" 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:**

8 5/8" surface casing conventionally drilled -

Cement with 290 sacks Type III cement with 0.25 pps Celloflake, 3% calcium chloride. (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.

4 1/2" Production Casing Two Stage -

Stage collar set @ 4460'. First Stage: Lead with w/299 sacks Premium Lite cmt w/3% calcium chloride, 0.4% sodium metasilicate, 0.25 pps celloflake, 5 pps LCM-1 and 0.4% FL-52. Tail w/75 sacks Premium Lite HS FM cmt w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52. Second Stage: 664 sacks Premium Lite cmt w/3% calcium chloride, 0.4% metasilicate, 0.25 pps celloflake, 5 pps LCM-1 and 0.4% FL-52. (2201 cu ft - 40% excess, circulate to surface, run CBL/temperature survey if cement is not circulated to surface.)

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every fourth joint off bottom, to the base of the Ojo Alamo @ 1323'. Two turbolating centralizers at the base of the Ojo Alamo 1323'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

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

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.

Special Drilling Operations (Air/Mist Drilling):

- 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:

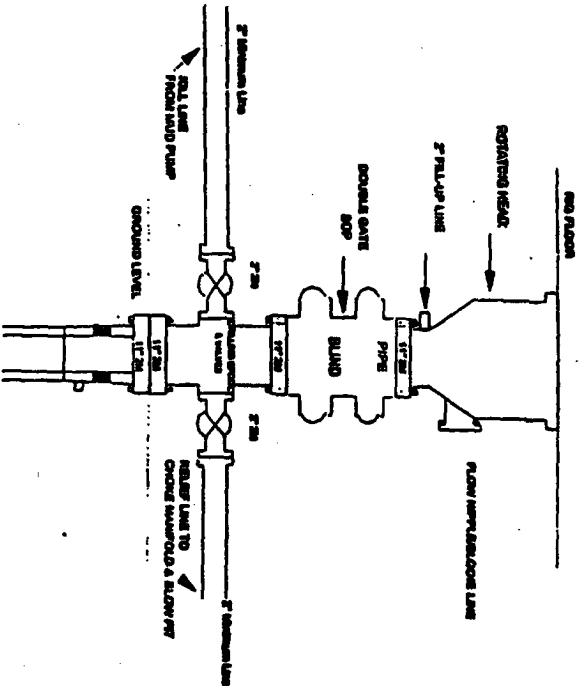
Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	2500 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of Section 26 is dedicated to the Dakota formation.
- This gas is dedicated.

Sean Corrigan  
Drilling Engineer

November 29, 2004  
Date

# Burlington Resources

## Drilling Rig 2000 psi System



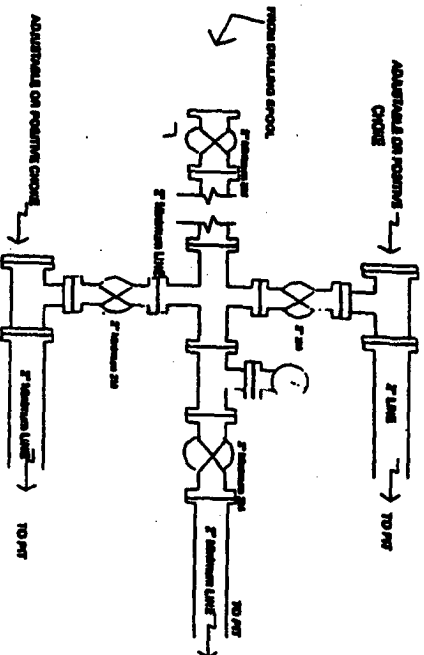
BCP installation from Surface Casing Point to Total Depth. 11" Bore 10" Minimum, 2000 psi working pressure double gate BCP to be equipped with blind rams and pipe rams. A 500 psi working pressure on top of ram preventer. All BCP equipment is 2,000 psi working pressure

Figure #1

4-20-01

# BURLINGTON RESOURCES

## Drilling Rig Choke Manifold Configuration 2000 psi System



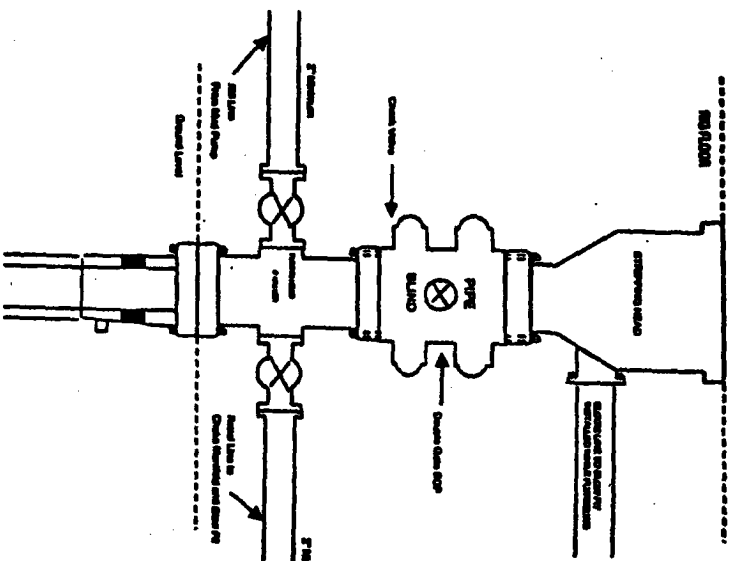
Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

# BURLINGTON RESOURCES

## Completion/Workover Rig BCP Configuration 2000 psi System



Minimum BCP installation for all Completion/Workover Operations. 7-1/16" Bore, 2000 psi minimum working pressure double gate BCP to be equipped with blind and pipe rams. A stoping head to be installed on the top of the BCP. All BCP equipment is 2000 psi working pressure or greater excluding 500 psi stoping head.

Figure #2