

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2008 MAR 9 AM 10:40 RECEIVED OTO FARMINGTON NM	5. Lease Number NMSF-078356-B Unit Reporting Number NMNM-078394A
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON</b> RESOURCES Oil & Gas Company		7. Unit Agreement Name Huerfanito Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700		8. Farm or Lease Name 9. Well Number #47R
4. Location of Well Unit A (NENE), 895' FNL, 1100' FEL  Latitude 36° 33.0629'N Longitude 107° 46.2039'W		10. Field, Pool, Wildcat Ballard Pictured Cliffs/ Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) A Sec. 27, T27N, R9W API # 30-045- 33627
14. Distance in Miles from Nearest Town 32 miles to Bloomfield, NM		12. County San Juan
15. Distance from Proposed Location to Nearest Property or Lease Line 395'		13. State NM
16. Acres in Lease		17. Acres Assigned to Well 160 PC NE4/320 PC E2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 52'- Huerfanito Unit #105		
19. Proposed Depth 2375'		20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6304' GL		22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Armando Sandoval</u> Regulatory Compliance Assistant III		<u>3-2-06</u> Date

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE

AFM

DATE

3/27/06

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.

NMOC

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

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
PERMIT AND REPORTS

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

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- <b>33627</b>	<sup>2</sup> Pool Code 71439 / 71629	<sup>3</sup> Pool Name Ballard Pictured Cliffs / Basin Fruitland Coal
<sup>4</sup> Property Code 7138 ✓	<sup>5</sup> Property Name HUERFANITO UNIT	<sup>6</sup> Well Number 47R ✓
<sup>7</sup> GRID No. 14538 /	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	<sup>9</sup> Elevation 6304' ✓

<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
A	27	27-N	9-W		895'	NORTH	1100'	EAST	SAN JUAN

<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
A									
<sup>12</sup> Dedicated Acres PC 160.0 ac NE4 FC 320.0 ac E2			<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

18

<div><p>N 89° 55' 45" W 5262.45'</p><p>LAT: 36°33.0628' N. LONG: 107°46.2039' W. MAD 1927</p><p>USA SF-078356-B</p><p>27</p><p>USA SF-080117</p></div>	<div><p><b>17 OPERATOR CERTIFICATION</b></p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p><p><u>Amanda Sandoval</u> Signature Amanda Sandoval Printed Name Regulatory Assistant III Title 2/23/2006 Date</p><p><b>18 SURVEYOR CERTIFICATION</b></p><p>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.</p><p>Date of Survey <u>2/23/2006</u> Signature and Seal of Professional Surveyor: <u>Carl A. Reed</u> Certificate Number 15703</p></div>
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Office

Energy, Minerals and Natural Resources

May 27, 2004

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

## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.

30-045- 33627

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil &amp; Gas Lease No.

NMSF-078356-B

7. Lease Name or Unit Agreement Name

Huerfanito Unit

8. Well Number

#47R

9. OGRID Number

14538

10. Pool name or Wildcat

Ballard Pictured Cliffs/ Basin Fruitland Coal

SUNDRY 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 &amp; GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter A : 895 feet from the North line and 1100 feet from the East line  
Section 27 Township 27N Rng 9W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

6304'

Pit or Below-grade Tank Application

☐ or Closure ☐

Pit type

New Drill

Depth to Groundwater

&gt;100'

Distance from nearest fresh water well

&gt;1000'

Distance from nearest surface water

Pit Liner Thickness:

n/a

mil

Below-Grade Tank:

Volume

bbls;

Construction Material

## 12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

## NOTICE OF INTENTION TO:

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

## SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐COMMENCE DRILLING OPNS. ☐CASING/CEMENT JOB ☐ALTERING CASING ☐P AND A ☐

OTHER:

New Drill ☒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.

New Drill, Unlined:

Burlington Resources proposes to construct a new drilling pit and an associated vent/flare pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and vent/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 vent/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

TITLE

Regulatory Assistant III

DATE

3/2/2006

Type or print name

Amanda Sandoval

E-mail address:

asandoval@br-inc.com

Telephone No.

505-326-9891

For State Use Only

APPROVED BY

TITLE

DEPUTY OIL &amp; GAS INSPECTOR, DIST. III

DATE

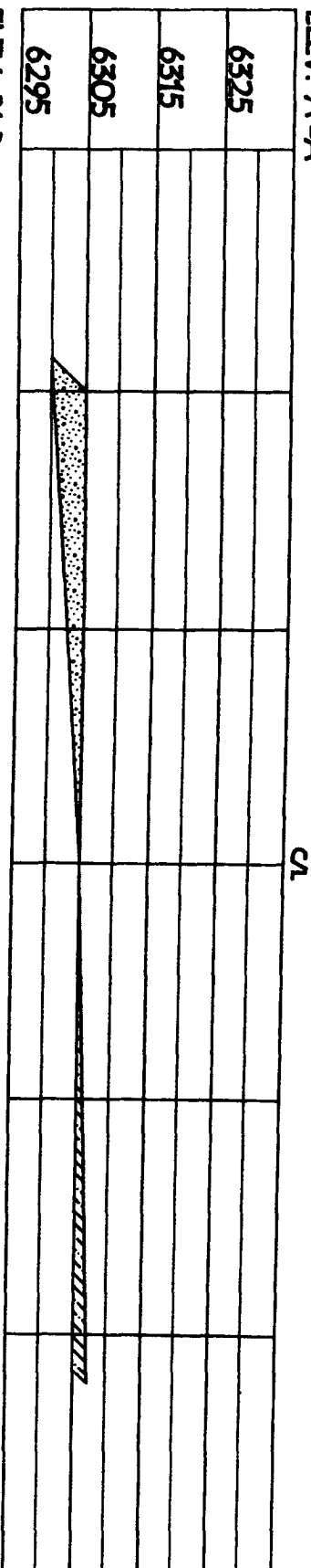
APR 03 2006

Conditions of Approval (if any):

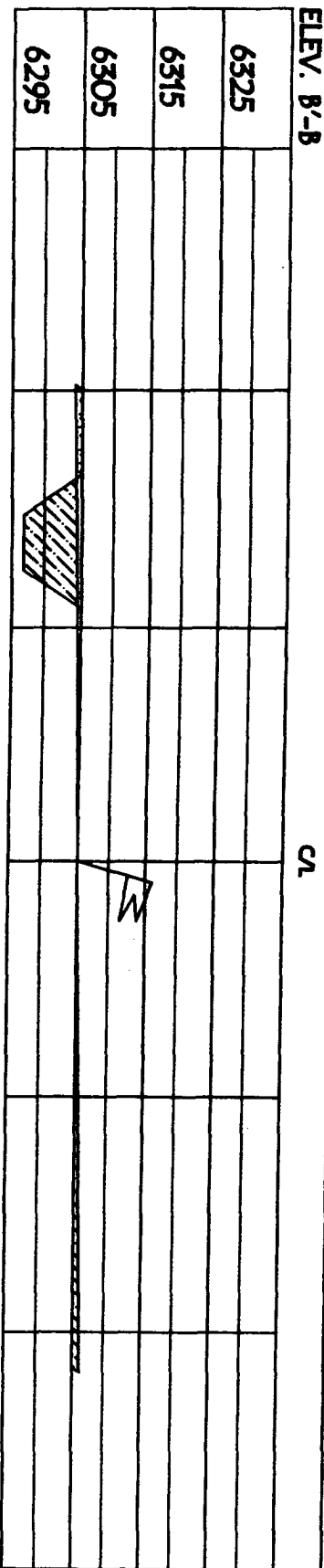


**BURLINGTON RESOURCES OIL & GAS COMPANY LP**  
**HUERFANITO UNIT 47R, 895' FNL & 1100' FEL**  
**SECTION 27, T-27-N, R-9-W, NMPM, SAN JUAN COUNTY, NM**  
**GROUND ELEVATION: 6304', DATE: FEBRUARY 8, 2006**

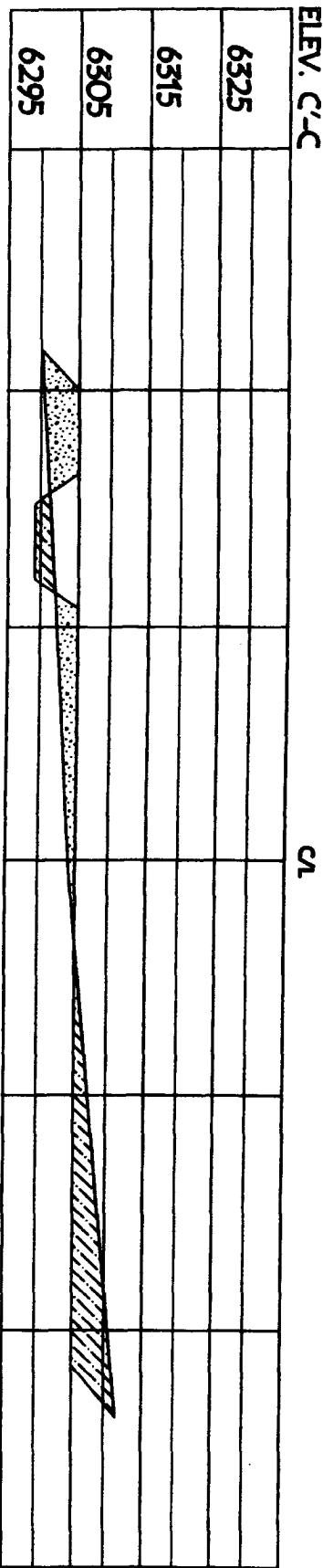
**ELEV. A'-A**



**ELEV. B'-B**



**ELEV. C'-C**



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:** Huerfanito Unit #47R  
**Location:** Unit A (NENE) 895' FNL & 1100' FEL, Section 27, T27N, R09W  
 San Juan County, New Mexico  
 Latitude 36° 33.0629'N; Longitude 107° 45.2039'W  
**Formation:** Ballard Pictured Cliffs/ Basin Fruitland Coal  
**Elevation:** 6304' GR

Formation:	Top	Bottom	Contents
Surface	San Jose		
Ojo Alamo	1377'		
Kirtland	1449'	2006'	gas
T/Fruitland	2006'		gas
Pictured Cliffs	2175'		
Total Depth	2375'		

**Logging Program:** None

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis. Fluid Loss</u>
0- 120'	Spud/Air/Air Mist	8.4-8.9	40-50 no control
120-2375'	Non-dispersed	8.4-9.5	30-60 no control

**Casing Program:**

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
8 3/4"	0 - 120'	7"	20.0#	J-55
6 1/4"	0 - 2375'	4 1/2"	10.5#	J/K-55

**Tubing Program:**

0 - 2375'	2 3/8"	4.7#	J-55
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**Float Equipment:** 7" surface casing - guide shoe. Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - float shoe and float collar on bottom. Centralizers run every third joint above shoe to the base of the Ojo Alamo @ 1449'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1449'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

**Wellhead Equipment:** 7" x 4 1/2" x 2 3/8" x 11" 2000 psi xmas tree assembly.

March 2, 2006

**Cementing:**

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

7" surface casing - Cement with 42 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (54 cu ft of slurry @ 1.28 yield). 200% excess, bring cement to surface. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface. **WOC until cement establishes 250 psi compressive strength prior to NU of BOPE.**

4 1/2" production casing - Cement with 113sx (241cu ft of slurry @ 2.13 yield) Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack celloflake, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks (124 cu ft of slurry @ 1.38 yield) Type III cmt with 1% calcium chloride, 1/4#/sack Celloflake and 0.2% FL-52. Total of 365 cf - 50% excess to circulate to surface.

**BOP and tests:**

Surface to TD - 11" 2000 psi (minimum double gate BOP stack (Reference Figure #1 and #2). Prior to drilling out surface casing, test ~~rams~~ <sup>BOPE</sup> to 600 psi/30 min.


Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

**Additional information:**

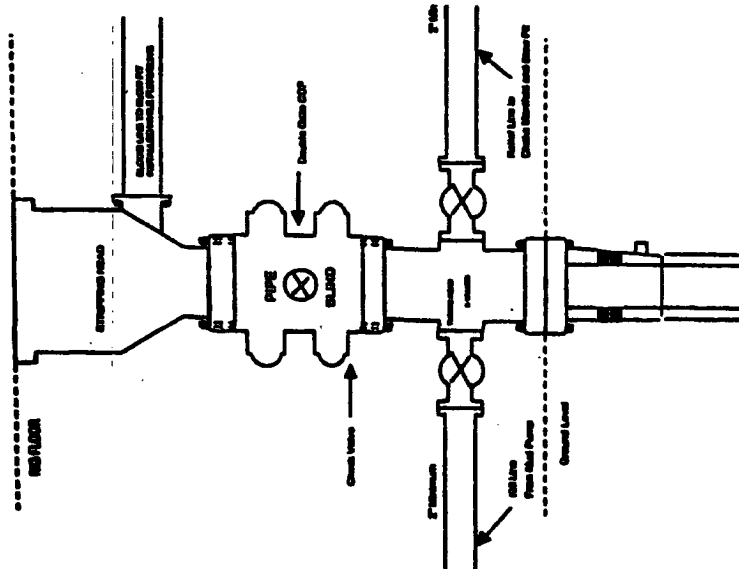
- \* The Fruitland Coal/Pictured Cliffs formations will be completed.
- \* Anticipated pore pressure for the Fruitland is between 600 - 700 psi.
- \* This gas is dedicated.
- \* The east half of section 27 is dedicated to Fruitland Coal and the northeast quarter Is dedicated to Pictured Cliffs.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

  
Drilling Engineer

3/2/06  
Date

# BURLINGTON RESOURCES

Completion/Workover Rig  
BOP Configuration  
2,000 psi System

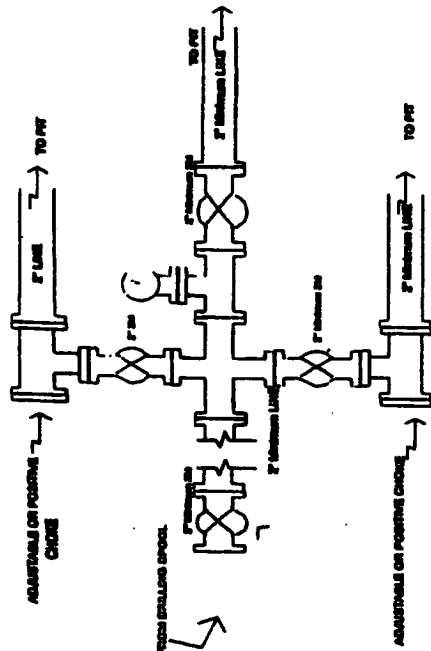


Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi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

Figure #2

# BURLINGTON RESOURCES

Drilling Rig  
Choke Manifold Configuration  
2000 psi System

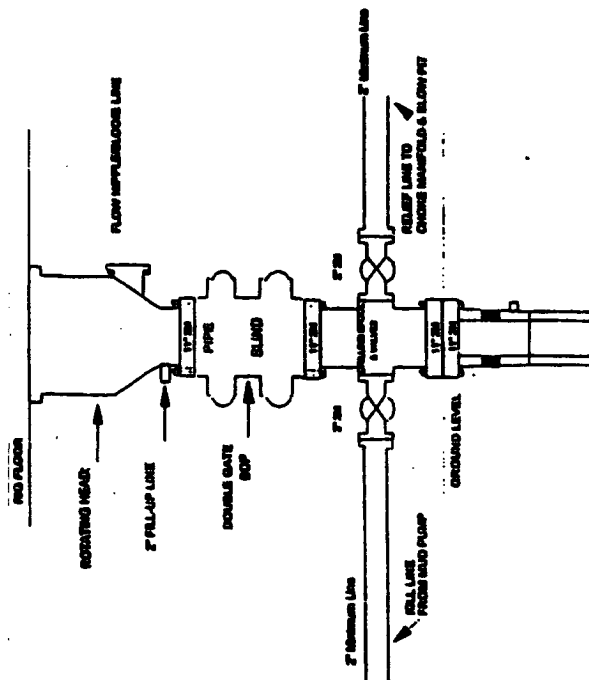


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

# Burlington Resources

Drilling Rig  
2000 psi System



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

Figure #1