

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 MAY 10 AM 9 12

1a. Type of Work DRILL	5. Lease Number NMSF-080117 Unit Reporting Number NMAW-0783948
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON 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
4. Location of Well Unit A (NENE), 665' FNL, 1165' FEL Latitude 36° 32.2295'N Longitude 107° 46.2192'W	9. Well Number #74R
	10. Field, Pool, Wildcat Basin Dakota, Blanco MV
	11. Sec., Twn, Rge, Mer. (NMPM) Sec. 34, T27N, R9W API # 30-045-33739
14. Distance in Miles from Nearest Town 29 miles to Bloomfield, NM	12. County San Juan
	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 665'	
16. Acres in Lease	17. Acres Assigned to Well 320 DK N2/ 320 MV E2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 400' - Huerfanito Unit #35	
19. Proposed Depth 6860'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6456' 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 Analyst	<u>5-9-06</u> Date

PERMIT NO.

APPROVAL DATE

APPROVED BY D. Montecinos

TITLE AFM

DATE 5/25/06

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.

BLM FORM 3160-3, MAY 2004 EDITION ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

3. Subject to review, to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

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

2006 MAY 12 AM 9 08 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT
RECEIVED
OIL CONSERVATION DIVISION

*API Number 30-045-33739	*Pool Code 71599 / 72319	*Pool Name Basin Dakota / Blanco Mesaverde
*Property Code 7138	*Property Name HUERFANITO UNIT	*Well Number 74R
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP	*Elevation 6456'

¹⁰ Surface Location

UL or lot no. A	Section 34	Township 27N	Range 9W	Lot Idn	Feet from the 665	North/South line NORTH	Feet from the 1165	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. A	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 320.0 ac N2 MV 320.0 ac E2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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	5273.40'	665'	1165'	1980'	5291.22'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Patsy Clugston</i> Signature Patsy Clugston Printed Name Sr. Regulatory Specialist Title 4/24/2006 Date
5281.32'	2638.68'	34	2548.26'	15	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: MARCH 1, 2006 Signature and Seal of Professional Surveyor JASON C. EDWARDS Certificate Number 15269	

LEASE USA SF-080117

LEASE USA SF-080117

LEASE USA SF-078135

APR 28 2006

State of New Mexico

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-103

May 27, 2004

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 & GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter A : 665 feet from the North line and 1165 feet from the East line
Section 34 Township 27N Rng 9W NMPM County San Juan

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

6456' GL

Pit or Below-grade Tank Application

☐ or Closure ☐Pit type New Drill Depth to Groundwater >100 Distance from nearest fresh water well >1000 Distance from nearest surface water >1000Pit 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 ☐

OTHER:

New Drill ☒

SUBSEQUENT REPORT OF:

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

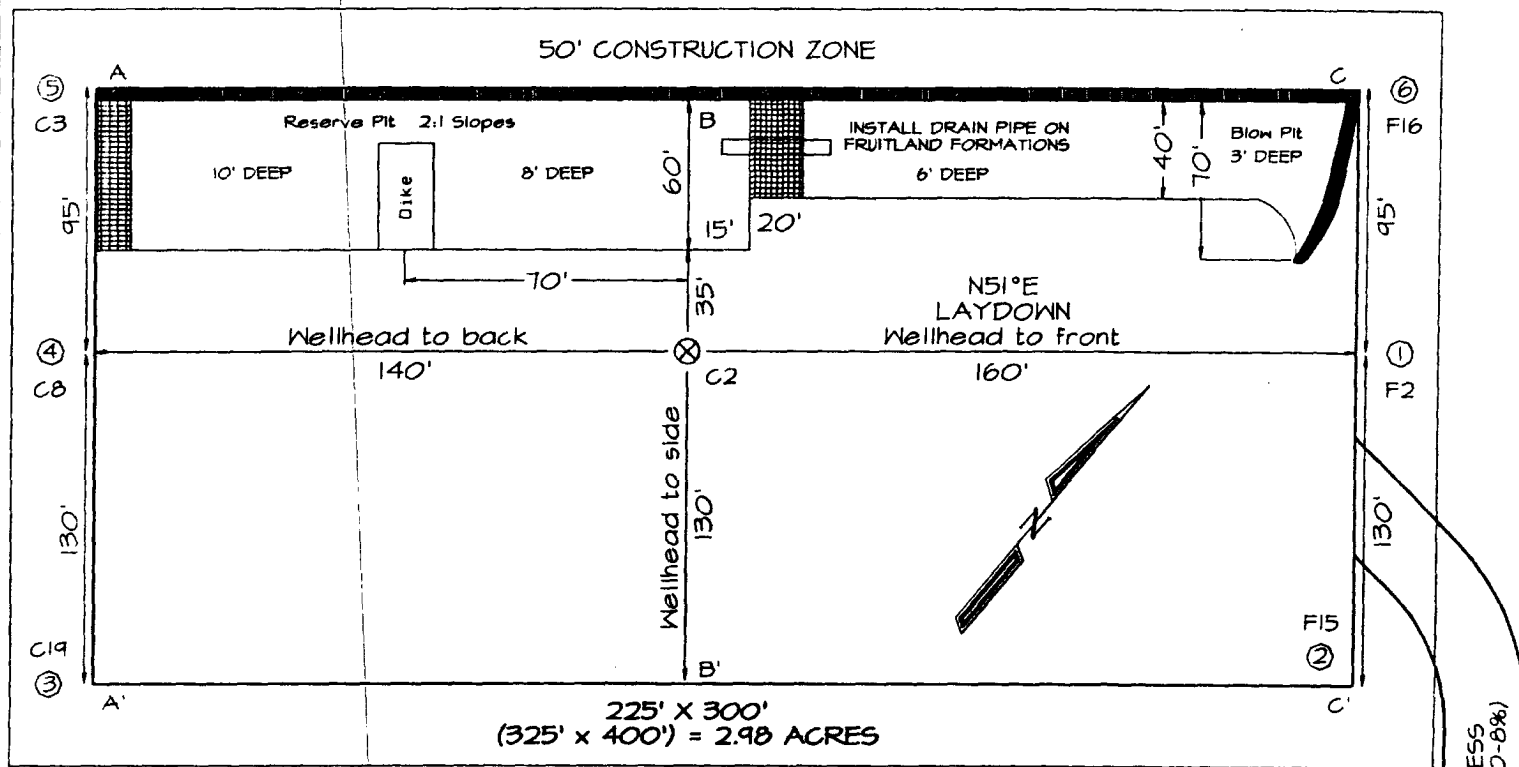
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Amanda Sandoval TITLE Regulatory Analyst DATE 5/9/2006Type or print name Amanda Sandoval E-mail address: asandoval@br-inc.com Telephone No. 505-326-9700
For State Use OnlyAPPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE MAY 30 2006
Conditions of Approval (if any):

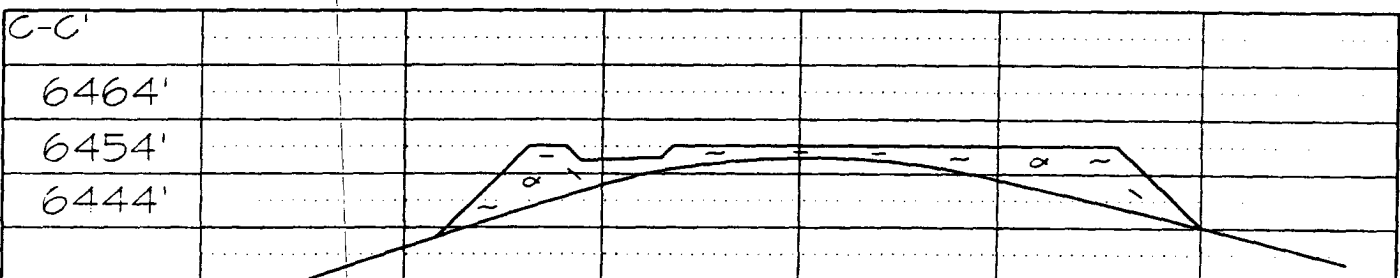
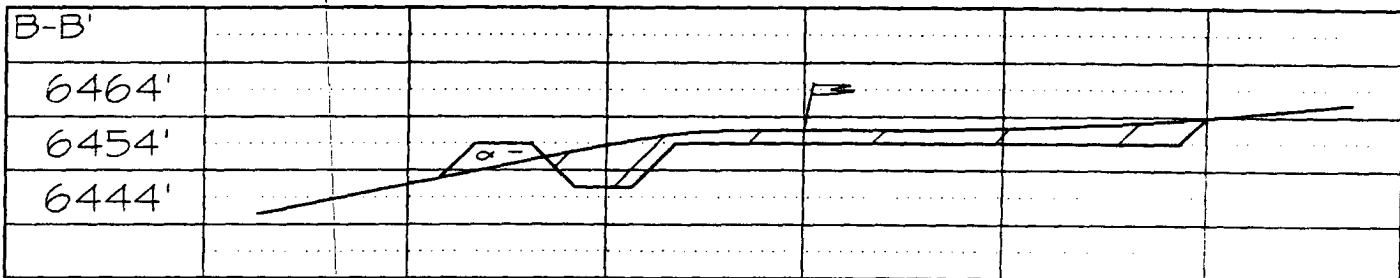
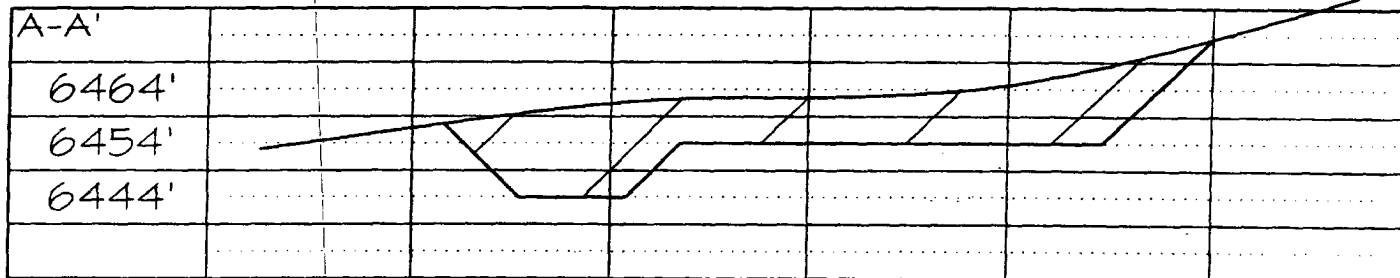
PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY, LP
HUERFANITO UNIT #74R, 665' FNL & 1165' FEL
SECTION 34, T27N, R9W, NMPM, SAN JUAN COUNTY, NM
GROUND ELEVATION: 6456' DATE: MARCH 1, 2006

LATITUDE: 36.53717° N
LONGITUDE: 107.77093° W
 DATUM: NAD1983



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: 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 #74R
Location: 665' FNL, 1165' FEL, Section 34, T-27-N, R-9-W
San Juan County, New Mexico
Latitude 36° 32.2295', Longitude 107° 46.2192'
Formation: Basin Dakota
Elevation: 6456' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1388'	
Ojo Alamo	1388'	1566'	aquifer
Kirtland	1566'	2038'	gas
Fruitland	2038'	2285'	
Pictured Cliffs	2285'	2411'	gas
Lewis	2411'	2758'	gas
Huerfanito Bentonite	2758'	3185'	gas
Chacra	3185'	3835'	gas
Cliff House	3835'	3943'	
Menefee	3943'	4595'	gas
Point Lookout	4595'	4968'	gas
Mancos	4968'	5785'	gas
Gallup	5785'	6585'	gas
Greenhorn	6585'	6638'	gas
Graneros	6638'	6672'	gas
Two Wells	6672'	6745'	
Paguate	6745'	6809'	
Cubero	6809'	6860'	
Encinal	6860'		gas
TD	6860'		

Logging Program:

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

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 320'	Spud MUD/Air/Air Mist	8.4-9.0	40-50	no control
320' - 6860'	LSND	8.4-9.0	30-60	no 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' - 320'	8 5/8"	24.0#	J-55
7 7/8"	0' - 6860'	4 1/2"	10.5#	J-55

Tubing Program: 0' - 6860' 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, BOPE 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, BOPE 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 321 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 @ 4445'. First Stage: Lead with w/266 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: 480 sacks Premium Lite cmt w/3% calcium chloride, 0.4% metasilicate, 0.25 pps celloflake, 5 pps LCM-1 and 0.4% FL-52. (2314 cu ft - 50% 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 @ 1566'. Two turbolating centralizers at the base of the Ojo Alamo 1566'. 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 Mesaverde and Dakota formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

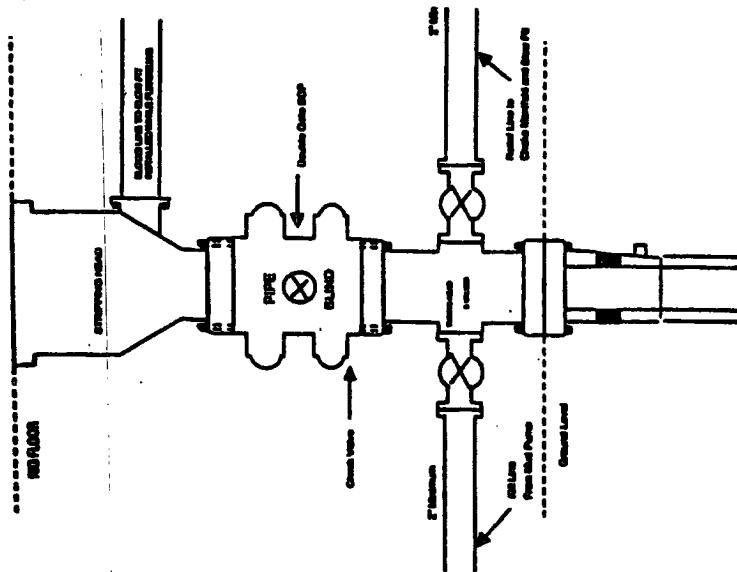
Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	2500 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The north half of Section 34 is dedicated to the Dakota formation and the east half of section 34 is dedicated to the Mesaverde.
- This gas is dedicated.


Drilling Engineer

5/9/06
Date

BURLINGTON RESOURCES

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

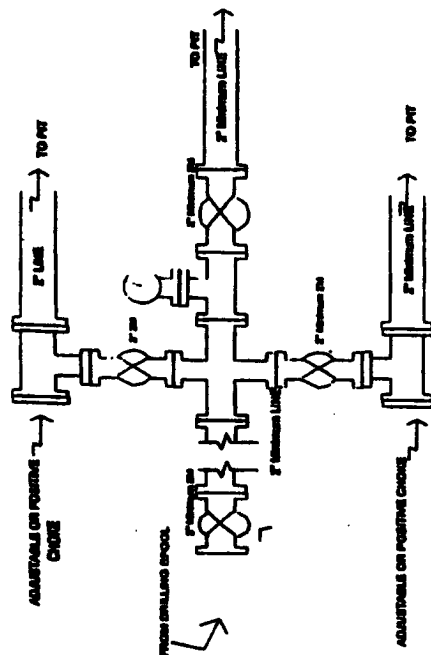


Minimum SOP insulation for all Comptrol®/Monitor Operations. 7-1/8" bore, 2000 psi minimum working pressure double gate SOP's to be equipped with tilted and pressure ramms. A shipping head to be installed on the top of the SOP. All SOP equipment is 2000 psi working pressure or greater excluding 50.0 psi actuating head.

Figure #2

BURLINGTON RESOURCES

**Drilling Rig
Choke Manifold Configuration
2000 psi System**

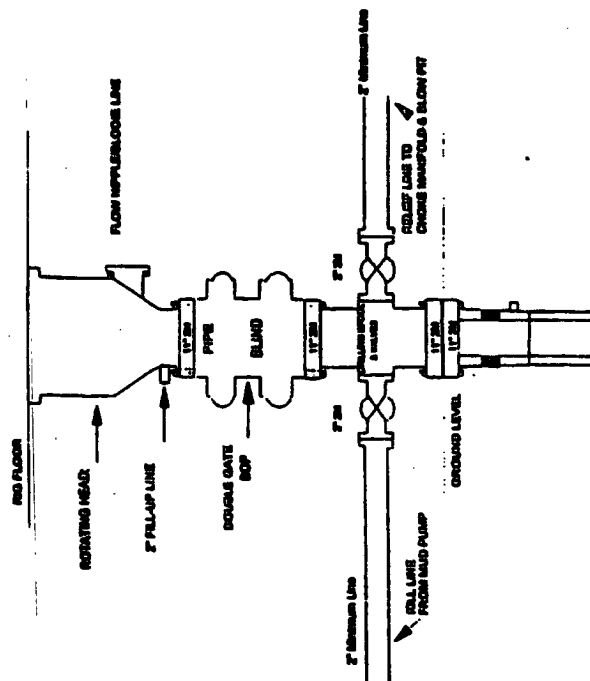


**Choice manifold installation from Surface Casing
Point to Total Depth. 2,000psi working pressure
equipment with two choices.**

Figure #3

Burlington Resources

**Drilling Rig
2000 psi System**



BCOP insulation from Surface Casing Point to Total Depth. 11" Bore 14" Nominated. 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A BOP psi recording fitted on top of ram preventers. All BCOP equipment to 2,000 psi working pressure.

Figure #1