

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

8

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
975' FNL, 1085' FEL
Latitude 36° 45.5203'N, Longitude 107° 59.4674'W

5. Lease Number
NMSF043260C

6. Unit Reporting Number
NINM 073693

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name
Fogelson 4

9. Well Number
1E

10. Field, Pool, Wildcat
Basin Dakota

11. Sec., Twn, Rge, Mer. (NMPM)
A Sec. 4, T-29-N, R-11-W
API # 30-045-32883

12. County
San Juan

13. State
NM

14. Distance in Miles from Nearest Town
4.5 miles to Int. of Hwy 64 and 550

15. Distance from Proposed Location to Nearest Property or Lease Line
975'

16. Acres in Lease

17. Acres Assigned to Well
E/305.89

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease
2414'

19. Proposed Depth
7030'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
5884' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Tammy Jones
Regulatory/Compliance Specialist

Date 12-1-04

PERMIT NO.

APPROVAL DATE

APPROVED BY D. Manteur

TITLE AFM

DATE 3-24-05

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.

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

NMOCB

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

FD STONE		LOT 3		LOT 2		LOT 1	
LOT 4				NM SF-076386		NM SF-043260-C	
		LAT. 36°45.5203' N. (NAD 27) LONG. 107°59.4674 W. (NAD 27)		NM SF-076387		1085'	
				NM SF-043260-C		S 00°28'35" E 2427.30' (M)	

MAR 2005
 2005
 02

17 OPERATOR CERTIFICATION

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

Tammie Jones

Signature

Tammie Jones

Printed Name

Regulatory Specialist

Title

12-1-04

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 knowledge.

OCTOBER 19, 2005

Date of Survey

14831

Registered Professional Surveyor

14831

Certificate Number

District I

Energy, Minerals and Natural Resources

May 27, 2004

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-

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

NMSF043260C

7. Lease Name or Unit Agreement Name

Fogelson 4

8. Well Number

1E

9. OGRID Number

14538

10. Pool name or Wildcat

Basin Dakota

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 : 975 feet from the North line and 1085 feet from the East line
Section 4 Township 29N Range 11W NMPM County San Juan

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

5884' GR

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

>200'

Pit Liner Thickness:

12

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 Pit ☒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 vent/flare pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit will be a lined 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 lined 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 Specialist

DATE

12/1/2004

Type or print name

Tammy Jones

E-mail address:

tjones3@br-inc.com

Telephone No.

505-326-9700

For State Use Only

APPROVED BY

TITLE

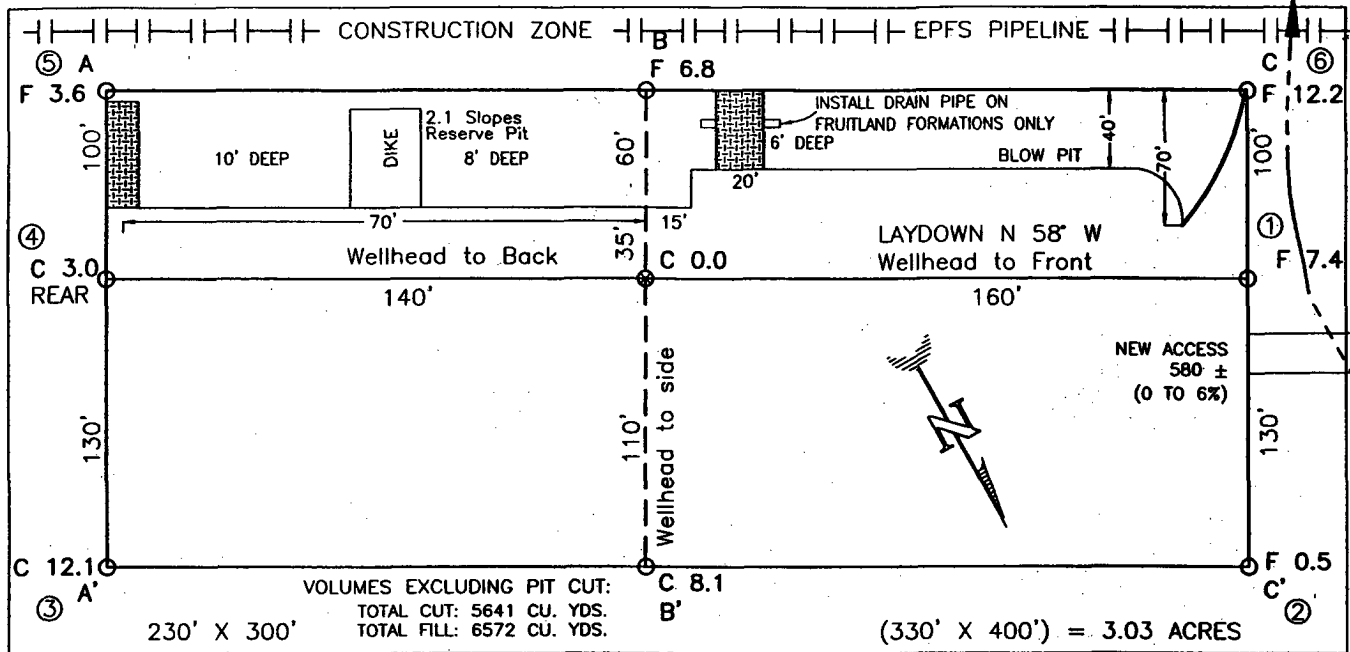
DEPUTY OIL & GAS INSPECTOR, DIST. 2

DATE

MAR 28 2005

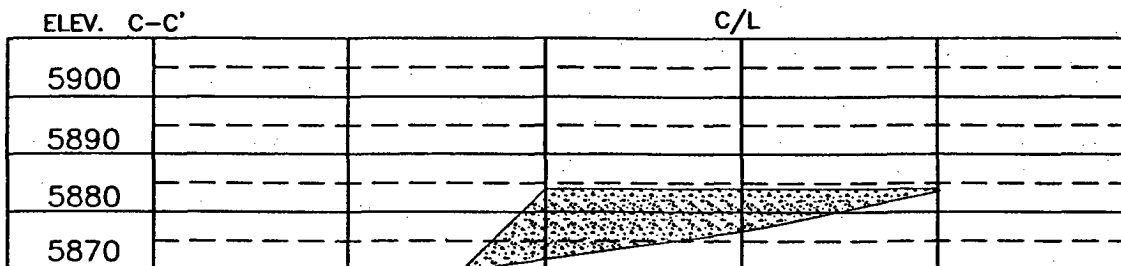
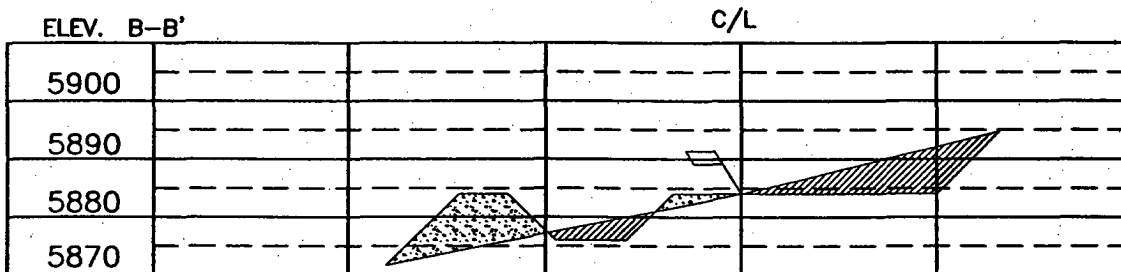
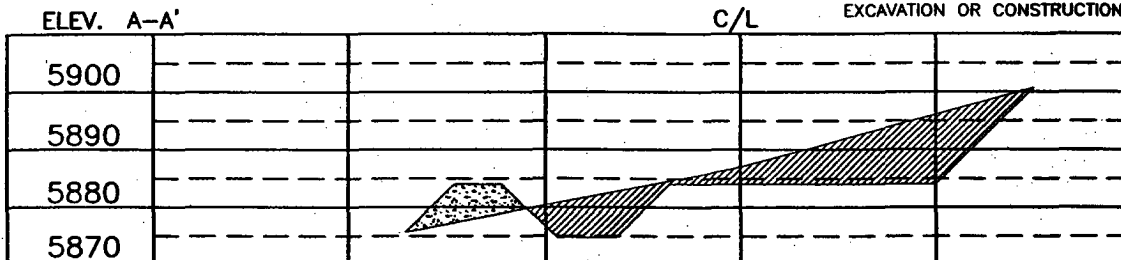
Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP
 FOGELSON 4 NO. 1E, 975 FNL 1085 FEL
 SECTION 4, T-29-N, R-11-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
 GROUND ELEVATION: 5884, DATE: OCTOBER 19, 2004



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: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



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.

REVISION:	DATE:	REMOVED BY:
DATE:	DATE:	DATE:

Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 15068 · Farmington, NM 87401
 Phone (505) 326-1772 · Fax (505) 326-6019
 NEW MEXICO L.S. No. 14831
 CAPLE: BR536CFB
 DATE: 10/27/04

DRWN BY: G.V.
 ROWF: BR536

OPERATIONS PLAN

Well Name: Fogelson 4 #1E
Surface Location: 975' FNL, 1085' FEL, Section 4, T-29-N, R-11-W
San Juan County, New Mexico
Latitude 36° 45.5203'N, Longitude 107° 59.4674'W
Formation: Basin Dakota
Elevation: 5884' GR

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	831'	aquifer
Ojo Alamo	831'	958'	aquifer
Kirtland	958'	1953'	gas
Fruitland	1953'	2148'	gas
Pictured Cliffs	2148'	2231'	gas
Lewis	2231'	2776'	gas
Huerfano Bentonite	2776'	3163'	gas
Chacra	3163'	3776'	gas
Massive Cliff House	3776'	3876'	gas
Menefee	3876'	4496'	gas
Intermediate TD	4026'		
Point Lookout	4496'	4848'	gas
Mancos	4848'	5728'	gas
Gallup	5728'	6482'	gas
Greenhorn	6482'	6534'	gas
Graneros	6534'	6595'	gas
Dakota	6595'	6766'	gas
Encinal Canyon	6766'	6838'	gas
Burro Canyon	6838'	6990'	gas
Morrison	6990'		
Total Depth	7030'		

Logging Program:

Cased hole logging - Gamma Ray, Cement bond from surface to TD
Open hole logging - none
Mud Logs - From 6282' to topset TD @ 6818' and from topset TD to final TD in Morrison.
Coring/DST - none

Mud Program:

<u>Interval- MD</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120 200	Spud/air/air-mist	8.4-9.0	40-50	no control
120- 4026'	LSND	8.4-9.0	30-60	no control
4026- 7030'	Air/Mist	n/a	n/a	n/a

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>Weight</u>	<u>Grade</u>
12 1/4"	0' - 120 200	9 5/8"	32.3#	H-40
8 3/4"	0' - 4026'	7"	20.0/23.0#	J-55/N-80
6 1/4"	0' - 6818'	4 1/2"	10.5#	J-55
3 7/8"	6818' - 7030'	Open Hole	n/a	n/a
<u>Tubing Program:</u>	0' - 7030'	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.

BOP Specifications, Wellhead and Tests (cont'd):**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. (38 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.

Conventionally Drilled

Cement with 88 sx Type III cement with 0.25 pps Celloflake, 2% CaCl. (113 cu ft of slurry, 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. 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. 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/365 sx Premium Lite with 3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail with 90 sx Type III cmt w/1% calcium chloride, 0.25 pps celloflake, 0.2% fluid loss (902 cu.ft. of slurry, 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 temp 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 with 193 sacks Premium Lite cmt w/3% calcium chloride, 0.25 pps Celloflake, 0.4% fluid loss, 5 pps LCM-1, 0.4% sodium metasilicate. Tail with 90 sacks with Type III cement with 1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: cement with 172 sacks with Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (902 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 fourth joint off bottom, to the base of the Ojo Alamo at 958'. Two turbolating centralizers at the base of the Ojo Alamo at 958'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -

Pump 194 sxs Premium Lite HS FM w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (384 cu.ft., 30% excess to achieve 100' overlap in 4-1/2" x 7" annulus). WOC a minimum of 18 hrs prior to completing.

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.

- 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 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.
- 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:

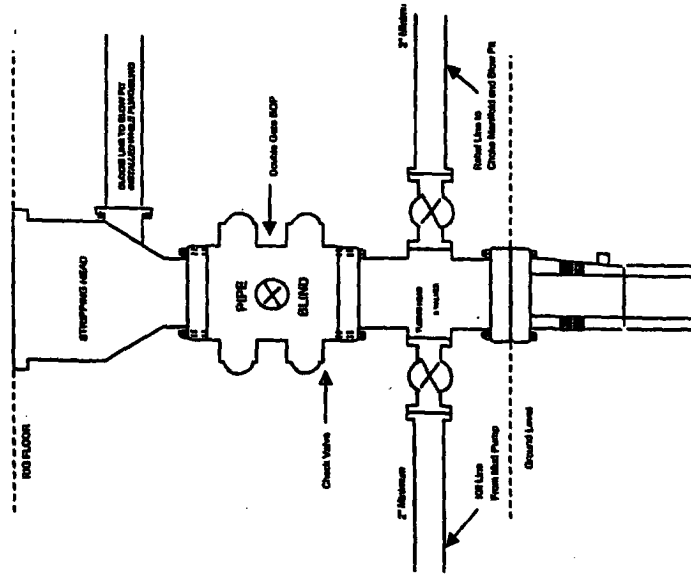
Fruitland Coal	150 psi
Pictured Cliffs	260 psi
Mesa Verde	375 psi
Dakota	1000 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The east half of Section 4 is dedicated to the Dakota in this well.
- This gas is dedicated.

Alan Corrigan
Drilling Engineer

December 14, 2004
Date

BURLINGTON RESOURCES

Completion/Workover Rig
BOP Configuration
2,000 psi System



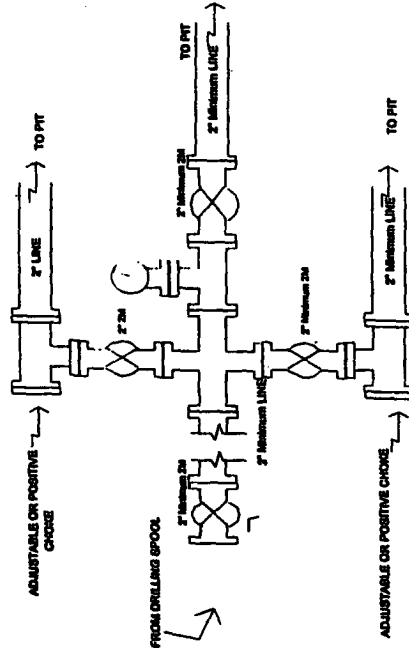
Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi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

Figure #2

4-20-01

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System



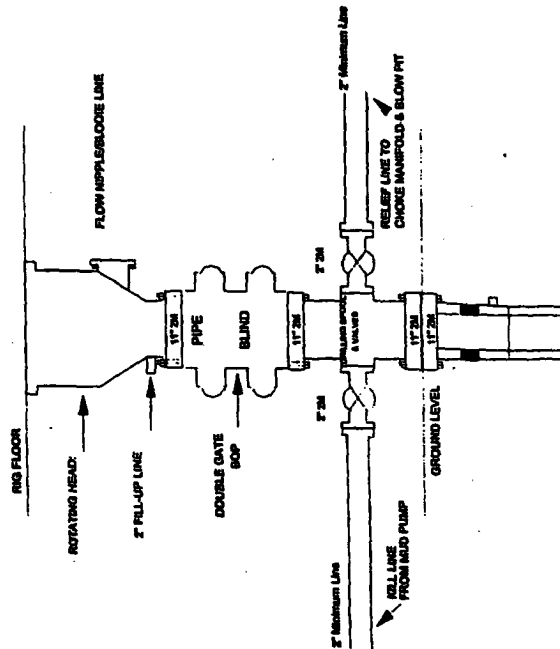
Choke manifold Installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

Burlington Resources

Drilling Rig
2000 psi System



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

Figure #1