

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2005 DEC 34 601 8 04

RECEIVED  
OTO FARMINGTON NM

1a. Type of Work  
DRILL

1b. Type of Well  
GAS

2. Operator  
**BURLINGTON**  
RESOURCES Oil & Gas Company, LP

3. Address & Phone No. of Operator  
PO Box 4289, Farmington, NM 87499  
(505) 326-9700

4. Location of Well  
Unit M (SWSW), 755' FSL & 860' FWL,  
Latitude 36° 46.6573'N  
Longitude 107° 47.4708'W

5. Lease Number  
NMSF-045646-A 065588  
Unit Reporting Number  
NM-83971-FC

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name  
Mansfield Com

9. Well Number  
2608

10. Field, Pool, Wildcat  
Basin Fruitland Coal

11. Sec., Twn, Rge, Mer. (NMPM)  
Sec. 28, T30N, R09W  
API # 30-045-33500

12. County  
San Juan

13. State  
NM

14. Distance in Miles from Nearest Town

15. Distance from Proposed Location to Nearest Property or Lease Line  
755'

16. Acres in Lease

17. Acres Assigned to Well  
FC - 320 acres W/2

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease  
Twinned w/Giomi Gas Com C #1

19. Proposed Depth  
2696'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
5831' GL

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program  
See Operations Plan attached

24. Authorized by: Patsy Clugston  
Sr. Regulatory Specialist

Date 12/29/05

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

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.

Not an HRA FC Well

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 40 CFR 3165.4

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

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045- 33500	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code 7285	<sup>5</sup> Property Name MANSFIELD COM	<sup>6</sup> Well Number 280S
<sup>7</sup> GRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	<sup>9</sup> Elevation 5831'

<sup>10</sup> Surface Location

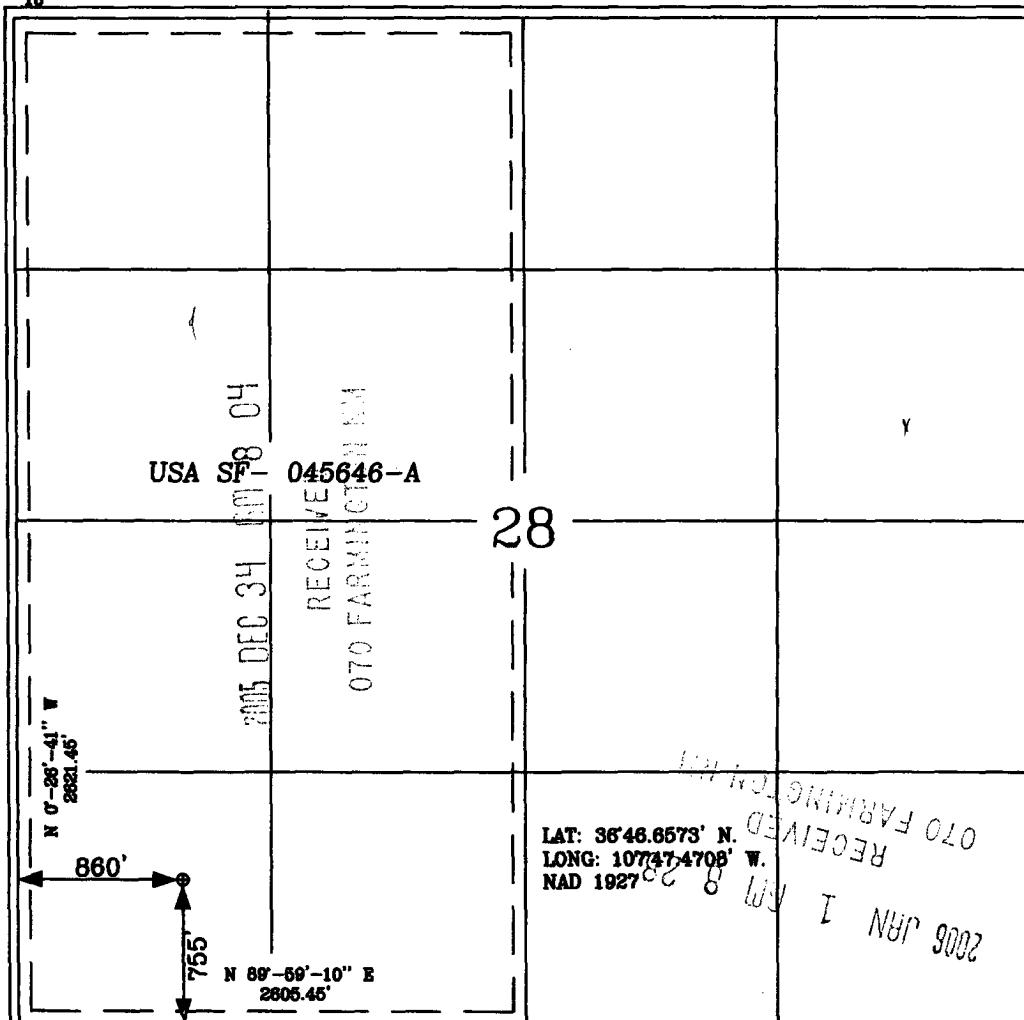
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	30-N	9-W		755'	SOUTH	860'	WEST	SAN JUAN

<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
M									
<sup>12</sup> Dedicated Acres 320 acres W/2			<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

16



17 OPERATOR CERTIFICATION

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

*Patsy Clugston*  
Signature  
Patsy Clugston  
Printed Name  
Sr. Regulatory Specialist  
Title  
12-12-05  
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 12-12-05  
Signature and Seal of Licensed Professional Surveyor  
GLEN W. RUSSELL  
15703  
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

May 27, 2004

**OIL CONSERVATION DIVISION**

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

WELL API NO.

30-045- **33500**

5. Indicate Type of Lease

STATE ☐

FEE ☐

6. State Oil & Gas Lease No.

Federal Lease - SF-045646-A

7. Lease Name or Unit Agreement Name

Mansfield Com

8. Well Number

260S

9. OGRID Number

14538

10. Pool name or Wildcat

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 & GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter

M

:

755'

feet from the

South

line and

860'

feet from the

West

line

Section

28

Township

30N

Rng

9W

NMPM

County

San Juan

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

5831' 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

>200'

Pit Liner Thickness:

n/a

mil

Below-Grade Tank:

Volume

bbbs;

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 Pit

☒

**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

*Patsy Clugston*

TITLE

Sr. Regulatory Specialist

DATE

12/15/2005

Type or print name

Patsy Clugston

E-mail address:

pclugston@br-inc.com

Telephone No.

505-326-9518

**For State Use Only**

APPROVED BY

*[Signature]*

TITLE

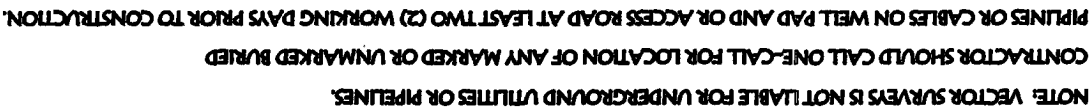
DEPUTY OIL & GAS INSPECTOR, DIST. 4

DATE

JAN 17 2006

Conditions of Approval (if any):

SECTION 28, T-30-N, R-9-W, NMPM, SAN JUAN COUNTY, NM  
GROUND ELEVATION: 5831', DATE: NOVEMBER 29, 2005

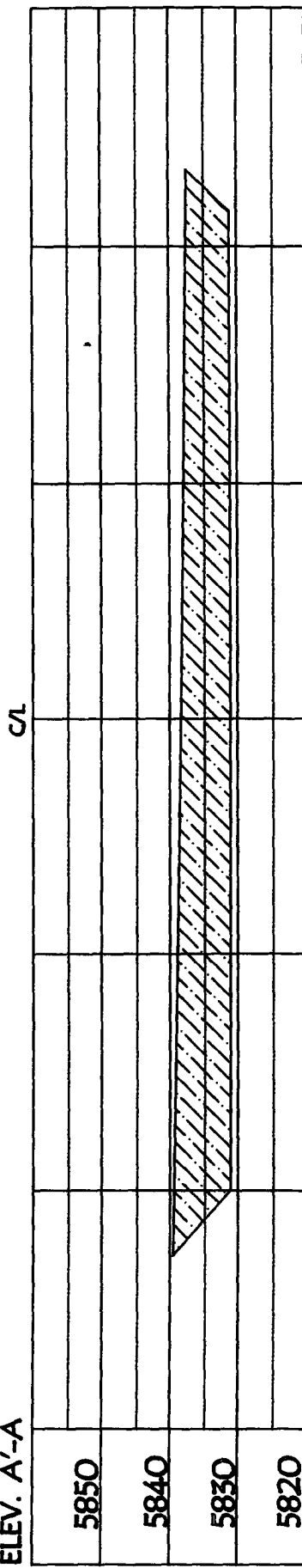


LATITUDE: 36° 46.6573' N LONGITUDE: 107° 47.4708' W NAD27

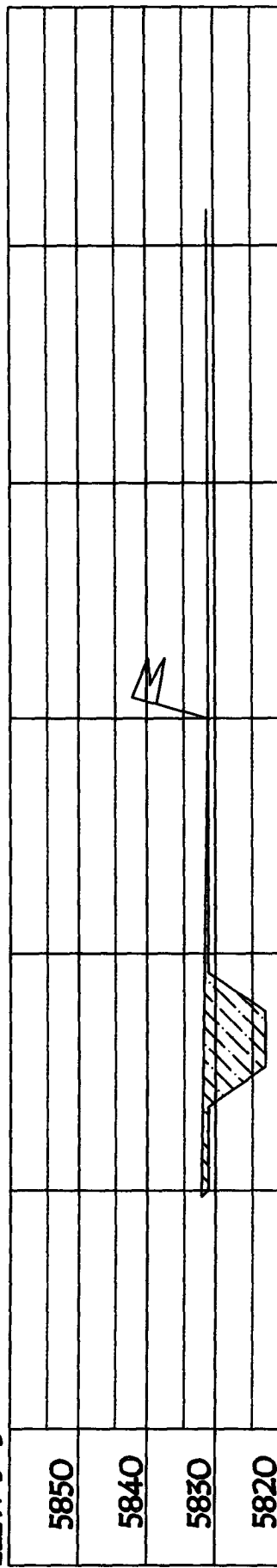
**RESERVE PIT DIKE, TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).**

BURLINGTON RESOURCES OIL & GAS COMPANY LP  
 MANSFIELD COM #260S, 755' FSL & 860' FWL  
 SECTION 28, T-30-N, R-9-W, NMPM, SAN JUAN COUNTY, NM  
 GROUND ELEVATION: 5831', DATE: NOVEMBER 29, 2005

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:** Mansfield Com 260S  
**Location:** Unit M (SWSW) 755' FSL & 860' FWL, Section 28, T30N, R9W  
 San Juan County, New Mexico  
 Latitude 36° 46.6573'N Longitude 107° 47.4708' W  
**Formation:** Basin Fruitland Coal  
**Elevation:** 5831' GR

Formation:	Top	Bottom	Contents
Ojo Alamo	1310'	1400'	aquifer
Kirtland	1400'	2337'	gas
T/Fruitland	2337'		gas
B/Fruitland Coal	2488'		gas
Pictured Cliffs	2496'		
<b>Total Depth</b>	<b>2696'</b>		

**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
120-2696'	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 $\frac{3}{4}$ "	0 - 120'	7"	20.0#	J-55
6 $\frac{1}{4}$ "	0 - 2696'	4 1/2"	10.5#	J/K-55

**Tubing Program:**

0 - 2696'	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 @ 1400'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1400'. 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.

December 15, 2005

**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 50 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (64 cu ft of slurry @ <sup>1.28</sup>1.61 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 136 sx (290 cu 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 414 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 <sup>rams</sup>~~rams~~ to 600 psi/30 min.

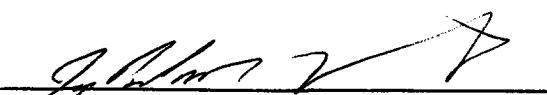
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

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:**

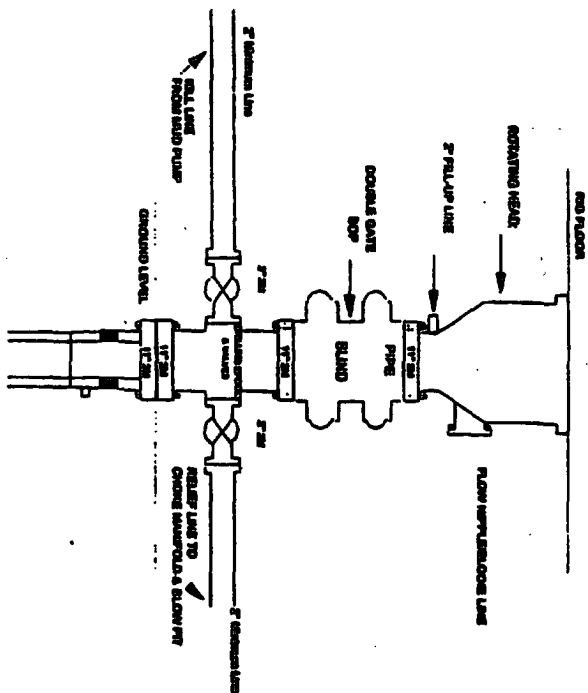
- \* The Fruitland Coal formation will be completed.
- \* Anticipated pore pressure for the Fruitland Coal is 600 - 700 psi.
- \* This gas is dedicated.
- \* The west half of the section is dedicated to this well.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

  
Drilling Engineer

12/29/05  
Date

# Burlington Resources

## Drilling Rig 2000 psi System

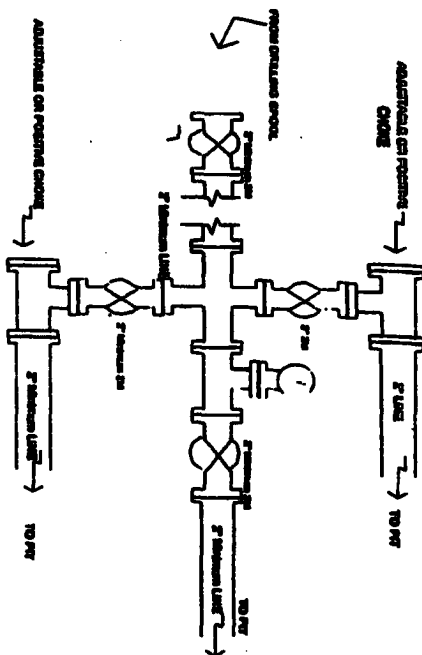


BCP insulation from Surface Casing Point to Total Depth. 1 1/2\"/>

Figure #1

# BURLINGTON RESOURCES

## Drilling Rig Choke Manifold Configuration 2000 psi System

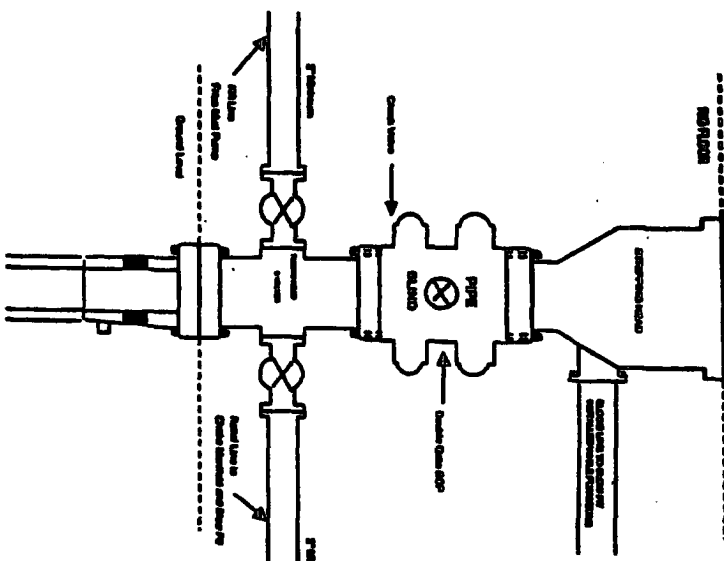


Choke manifold insulation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

# BURLINGTON RESOURCES

## Completion/Workover Rig BCP Configuration 20,000 psi System



Minimum BCP insulation for all Completion/Workover Operations. 7-1/16\"/>

Figure #2