

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number NMSF-079607 Unit Reporting Number MV-891001054A DK-8910010540
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 27-4 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 27-4 Unit Com 9. Well Number 34N
4. Location of Well -660' FSL, -830' FEL 370 20 Latitude 36° 31.5, Longitude 107° 13.9	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 34, T-27-N, R-4-W API # 30-039-26903
14. Distance in Miles from Nearest Town 24 miles from Gobernador	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 660'	
16. Acres in Lease	17. Acres Assigned to Well 320 E/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 900'	
19. Proposed Depth 8250'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 7021 GR 6996	22. Approx. Date Work will Start 1-10-02
23. Proposed Casing and Cementing Program See Operations Plan attached	DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"
24. Authorized by: <u>Peggy Cull</u> Regulatory/Compliance Supervisor	Date

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

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.

NMOCB

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039- 26903		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 20056	*Property Name SAN JUAN 27-4 UNIT COM		*Well Number 34N
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		*Elevation 6995'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	34	27N	4W		370	SOUTH	20	EAST	RIO ARRIBA

¹¹ 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

¹² Dedicated Acres MV - E/320 DK - E/320	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

<p>¹⁶</p> <p>Reissued to show amended location</p> <p>5283.30'</p> <p>5280.00'</p> <p>34</p> <p>070 Farmington, NM</p> <p>2004 FEB 18 PM 2:54</p> <p>RECEIVED</p> <p>5280.00'</p> <p>370'</p> <p>LAT: 36°31.4195'N LONG: 107°13.7465'W DATUM: NAD27</p> <p>NMSF-080675</p> <p>NMSF-079607</p>	<p>¹⁷ OPERATOR CERTIFICATION</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>Nancy Oltmanns</u> Signature</p> <p><u>Nancy Oltmanns</u> Printed Name</p> <p><u>Senior Staff Specialist</u> Title</p> <p><u>1-30-04</u> Date</p> <p>¹⁸ SURVEYOR CERTIFICATION</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><u>Date of Survey: JULY 3, 2003</u></p> <p>Signature and Seal of Professional Surveyor</p> <p><u>JASON C. EDWARDS</u> Certificate Number 15269</p>
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

Sundry Notices and Reports on Wells

1. Type of Well
GAS

2. Name of 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, Footage, Sec., T, R, M

370' FSL, 20' FEL, Sec. 34, T-27-N, R-4-W, NMPM

5. Lease Number
NMSF-079607

070 Farmington, NM 6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

CA#

~~San Juan 27-4 Unit~~

8. Well Name & Number

San Juan 27-4 U Com #34N

9. API Well No.

30-039-26903

10. Field and Pool

Blanco MV/Basin DK

11. County and State

Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

☒ Notice of Intent

☐ Abandonment

☒ Change of Plans

☐ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Final Abandonment

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

☐ Conversion to Injection

☒ Other -

13. Describe Proposed or Completed Operations

The location for the subject well has been moved from 660' FSL, 830' FEL to 370' FSL, 20' FEL at the request of the Carson National Forest. Attached are a new C-102 plat, operations plan, Multi-point surface use plan, topographic map, and cut and fill diagram.



14. I hereby certify that the foregoing is true and correct.

Signed Nancy Olthoff Title Senior Staff Specialist Date 1/30/04

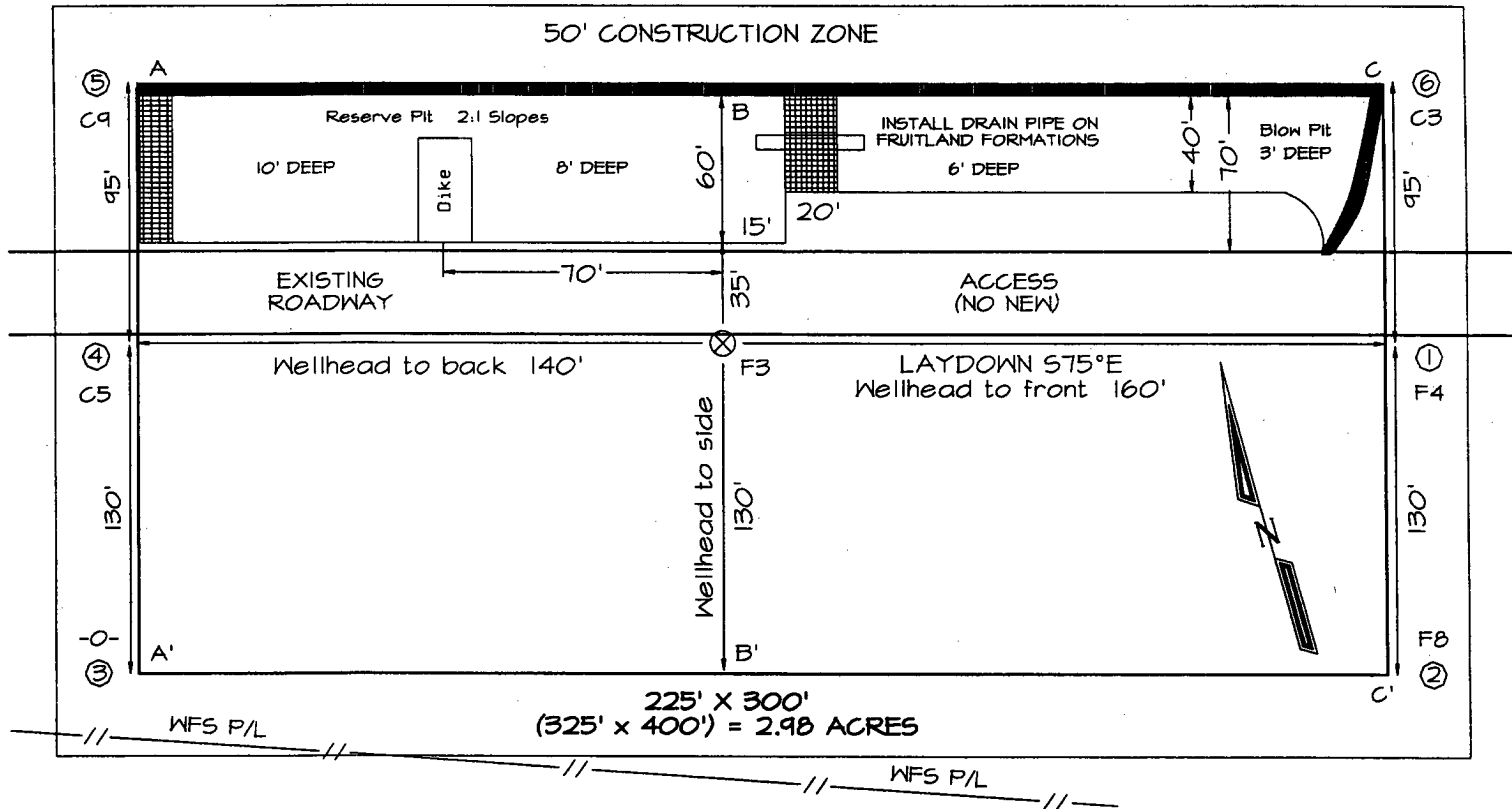
(This space for Federal or State Office use)

APPROVED BY [Signature] Title AFM Date 7-29-04

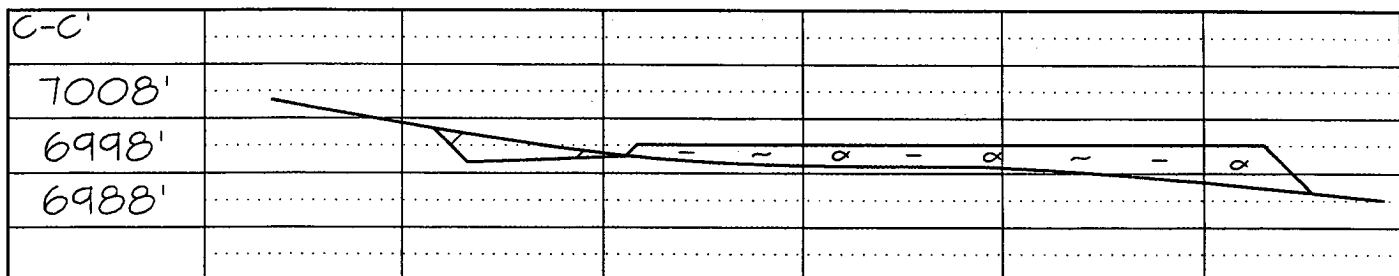
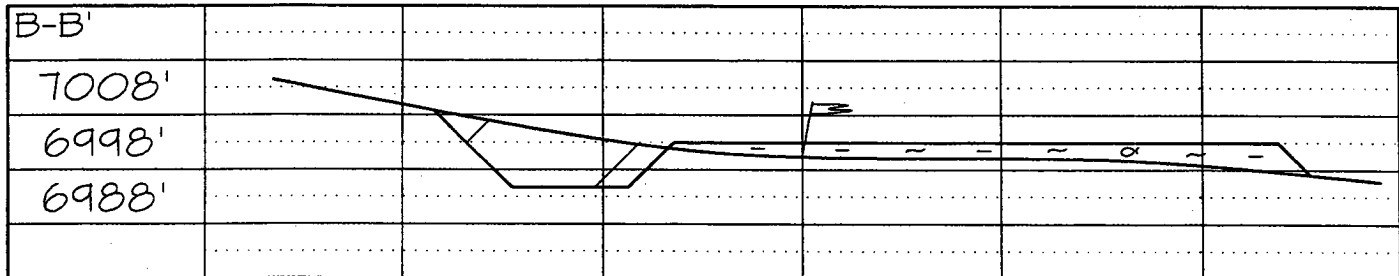
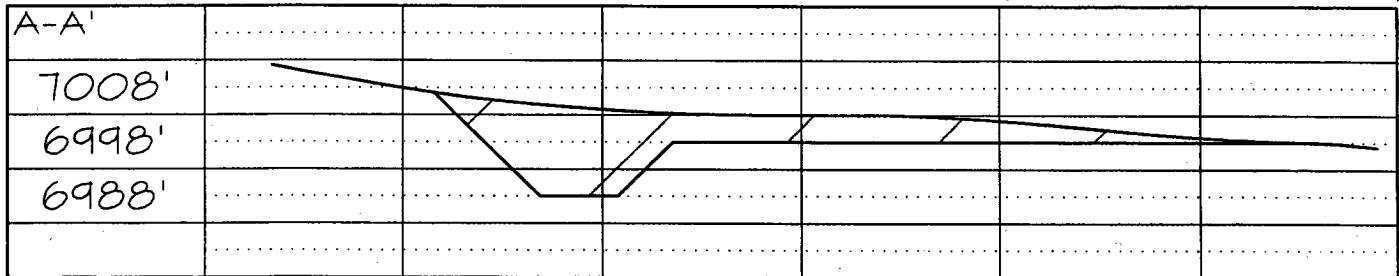
CONDITION OF APPROVAL, if any:

BURLINGTON RESOURCES OIL & GAS COMPANY, LP
 SAN JUAN 27-4 UNIT COM #34N, 370' FSL & 20' FEL
 SECTION 34, T27N, R4W, NMPM, RIO ARriba COUNTY, NM
 GROUND ELEVATION: 6995' DATE: JULY 3, 2003

LATITUDE: 36°31'25"
 LONGITUDE: 107°13'45"
 DATUM: NAD1927



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: San Juan 27-4 Unit Com #34N
Location: 370' FSL, 20' FEL, Section 34, T-27-N, R-4-W
Rio Arriba County, New Mexico
Latitude 36° 31.4195, Longitude 107° 13.7465
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6995' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3252'	
Ojo Alamo	3252'	3468'	aquifer
Kirtland	3468'	3637'	gas
Fruitland	3637'	3792'	
Pictured Cliffs	3792'	3932'	gas
Lewis	3932'	4277'	gas
Intermediate TD	4032'		
Huerfanito Bentonite	4277'	4762'	gas
Chacra	4762'	5492'	gas
Cliff House	5492'	5582'	
Menefee	5582'	5957'	gas
Point Lookout	5957'	6447'	gas
Mancos	6447'	7082'	gas
Gallup	7082'	7897'	gas
Greenhorn	7897'	7957'	gas
Graneros	7957'	7982'	gas
Dakota	7982'	8097'	gas
Paguate	8097'	8122'	gas
Upper Cubero	8122'	8162'	gas
Lower Cubero	8162'	8192'	gas
Oak Canyon	8192'		
TD	8212'		

Logging Program:

Mud Logs/Coring/DST -

Mud logs - none

Coring - none

DST - none

Open hole - none

Cased hole - Gamma Ray, CCL, CBL - surface to TD

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120' 200'	Spud MUD/Air/Air Mist	8.4-9.0	40-50	no control
200- 4032'	LSND	8.4-9.0	30-60	no control
4032- 8212'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

circulating media will be dependent on rig contractor on surface hole.

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' - 120' 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 4000'	7"	20.0#	J-55
8 3/4"	4000' - 4032'	7"	23.0#	L-80
6 1/4"	0' - 7800'	4 1/2"	10.5#	J-55
6 1/4"	7800' - 8212'	4 1/2"	11.6#	N-80

Tubing Program: 0' - 8212' 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 -

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 24 sacks 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. Test casing to 600 psi for 30 minutes.

9 5/8" surface casing conventionally drilled -

Cement with 88 sacks Type III cement with 0.25 pps Celloflake, 3% calcium chloride. (113 cu.ft., 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.

7" intermediate casing -

Lead with 366 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (903 cu ft- 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 a temperature 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 15 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 350 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 (903 cu. ft.-50% excess to circulate to surface).

4 1/2" Production Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 288 sacks Premium Lite HS w/ 0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52. (570 cu.ft., 30% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float collar stacked on top of float shoe.

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. The liner hanger will have a rubber packoff.

- 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.
- 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:

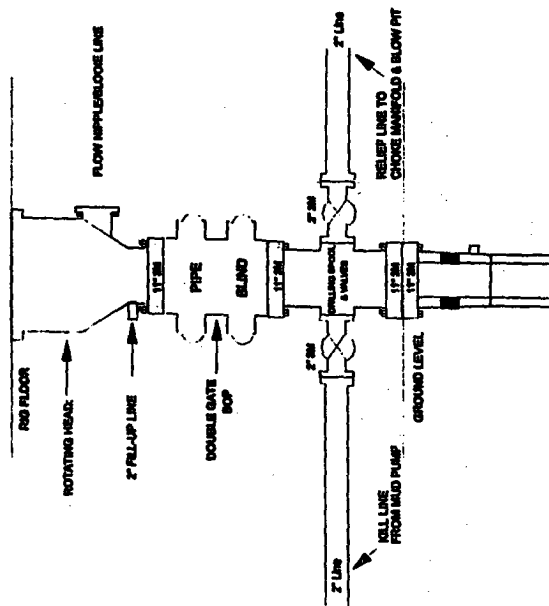
- The Mesa Verde and Dakota formation will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

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 east half of Section 34 is dedicated to the Mesa Verde and the Dakota.
- This gas is dedicated.

Sean Corrigan
Drilling Engineer

February 18, 2004
Date

Drilling Rig
3000 psi System



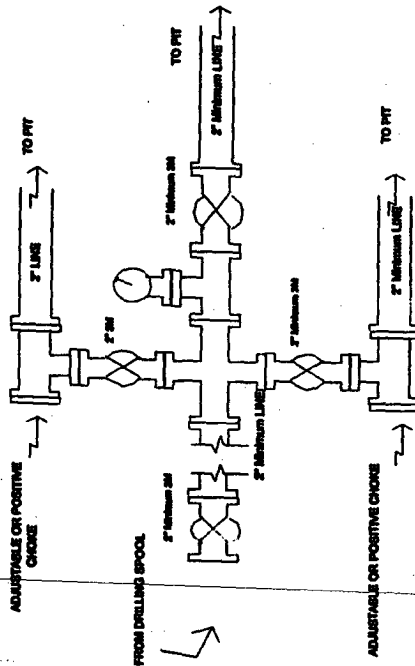
BOP Installation from Surface Casing Point to Total Depth. 11" Bore 10' Minimum 3000 psi working pressure on 3000 psi BOP. To be equipped with blind rams. A stripping head to be installed on top of ram preventers. All BOP equipment is 3,000 psi working pressure.

Figure #1

4-20-01

4-20-01

Drilling Rig
Choke Manifold Configuration
3000 psi System

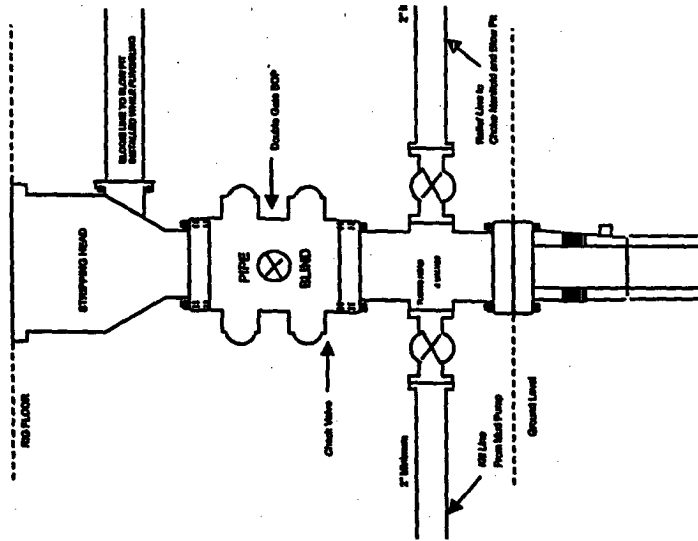


Choke manifold installation from Surface Casing Point to Total Depth. 3,000psi working pressure equipment with two chokes.

Figure #2

4-20-01

Completion/Workover Rig
BOP Configuration
3,000 psi System



Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 3000 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 3000 psi working pressure or greater excluding 500 psi stripping head.

Figure #3