

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2006 FEB 17 PM 3 15

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED  
FARMINGTON NM

1a. Type of Work DRILL	5. Lease Number NMNM-029146 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON</b> RESOURCES Oil & Gas Company	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 9. Well Number #238
4. Location of Well Unit F (SENW), 2265' FNL, 1705' FWL  Latitude 36.68335°N Longitude 107.79020°W	10. Field, Pool, Wildcat Basin Fruitland Coal  11. Sec., Twn, Rge, Mer. (NMPM) Sec. 33, T29N, R9W API # 30-045-33603
14. Distance in Miles from Nearest Town 8 miles to Blanco, NM	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1705'	
16. Acres in Lease	17. Acres Assigned to Well 320 W2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 675' - San Juan #22	
19. Proposed Depth 2603'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6068' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Armando Sanabue</u> Regulatory Compliance Assistant III	<u>2-17-06</u> Date

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE AFM

DATE 3/6/06

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.

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

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED REQUIREMENTS.

CROWN

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer 20, 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 <b>30-045- 33603</b>		*Pool Code <b>71629</b>	*Pool Name <b>Basin Fruitland Coal</b>
*Property Code <b>7451</b>	*Property Name <b>SAN JUAN</b>		*Well Number <b>23S</b>
*OGRID No. <b>14538</b>	*Operator Name <b>BURLINGTON RESOURCES OIL &amp; GAS COMPANY, LP</b>		*Elevation <b>6068</b>

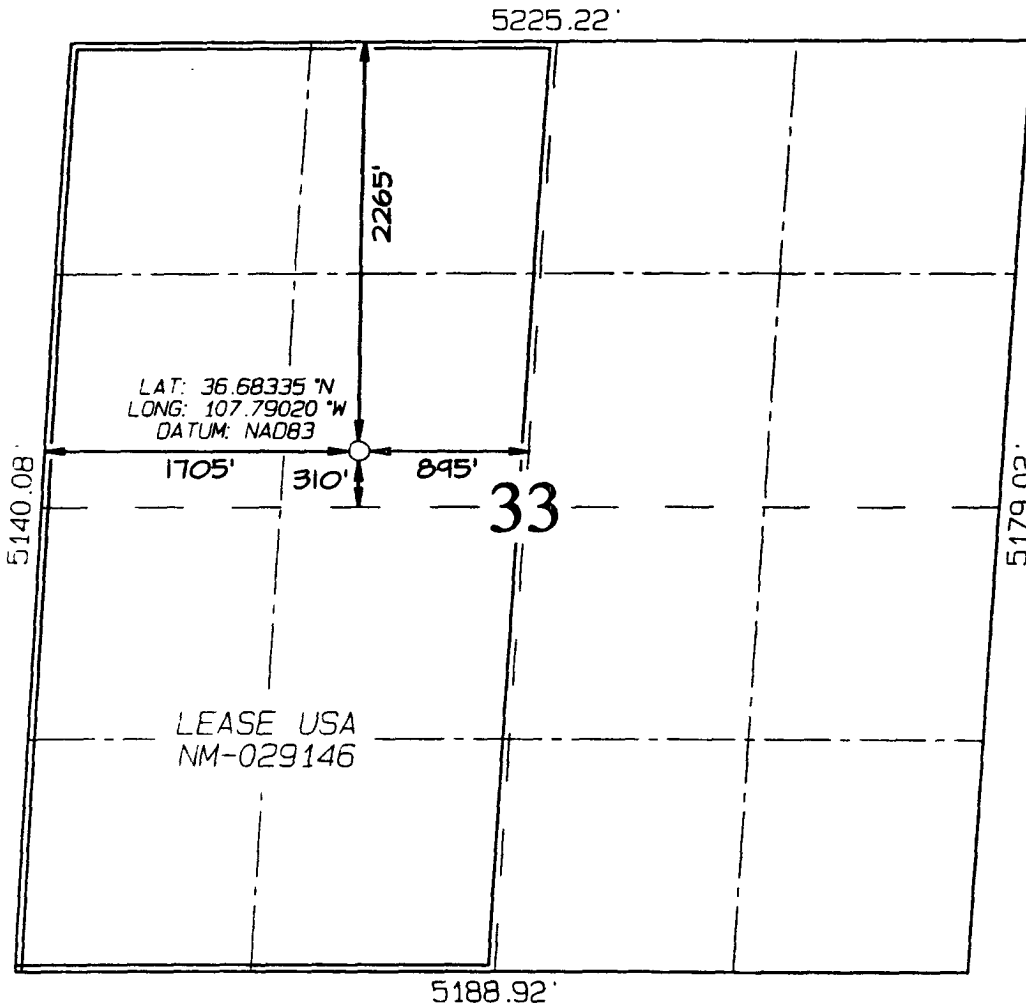
<sup>10</sup> Surface Location

UL or lot no. <b>F</b>	Section <b>33</b>	Township <b>29N</b>	Range <b>9W</b>	Lot Idn	Feet from the <b>2265</b>	North/South line <b>NORTH</b>	Feet from the <b>1705</b>	East/West line <b>WEST</b>	County <b>SAN JUAN</b>
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<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
<sup>12</sup> Dedicated Acres <b>320 W2</b>					<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



<sup>17</sup> OPERATOR CERTIFICATION

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

*Amanda Sandoval*  
Signature

**Amanda Sandoval**  
Printed Name

**Regulatory Assistant II**  
Title

**2-1-06**  
Date

<sup>18</sup> 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.

Survey Date: **JANUARY 12, 2006**

Signature and Seal of Professional Surveyor



**JASON C. EDWARDS**  
Certificate Number 15269

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-

336003

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil &amp; Gas Lease No.

NMNM-029146

7. Lease Name or Unit Agreement Name

San Juan

8. Well Number

#23S

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 &amp; GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter F : 2265 feet from the North line and 1705 feet from the West lineSection 33 Township 29N Rng 9W NMPM County San Juan

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

6068'

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

1200'  
1000'

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 ☐

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

TITLE

Regulatory Assistant II

DATE

2/9/2006

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

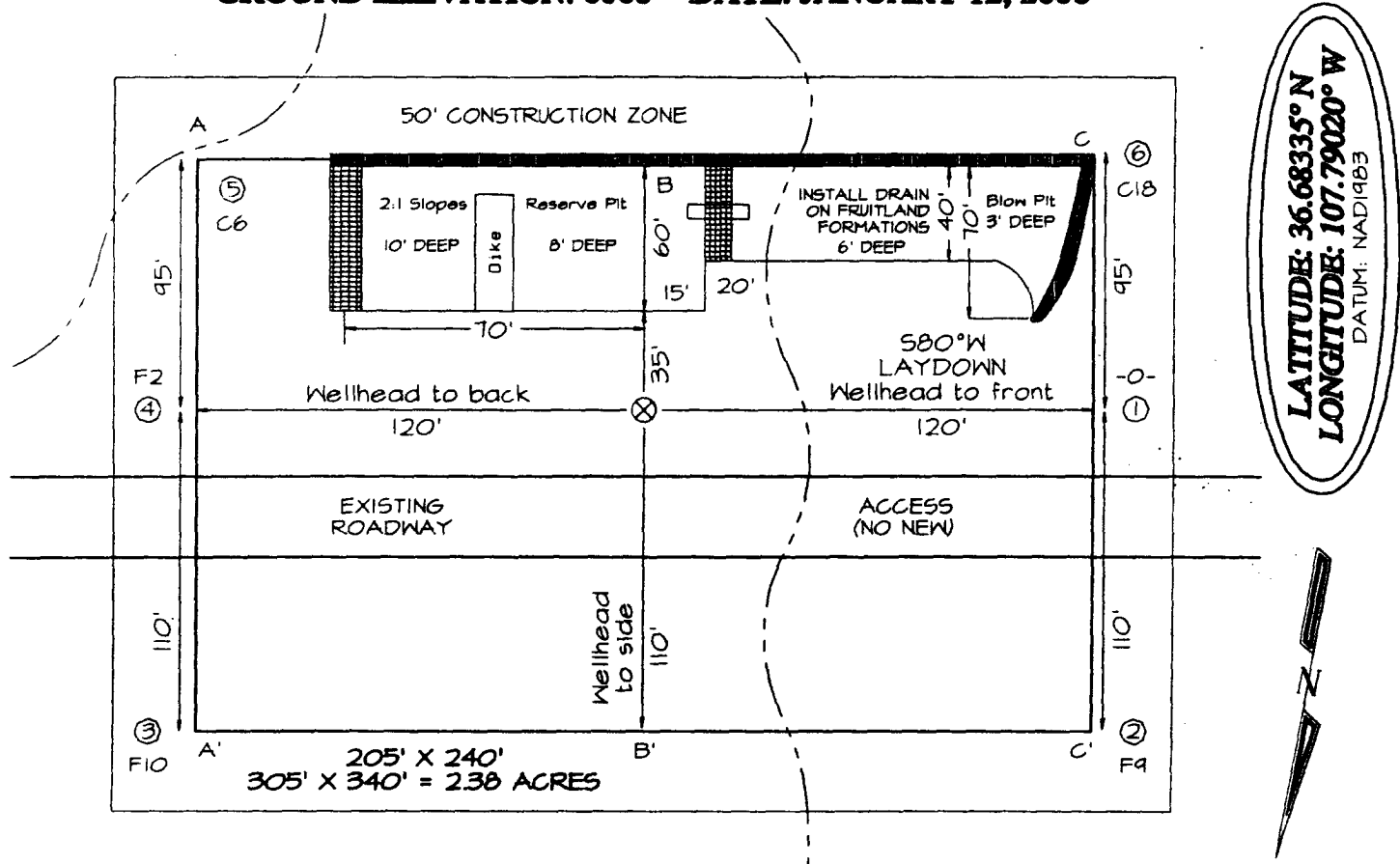
DEPUTY OIL &amp; GAS INSPECTOR, DIST. 33

DATE

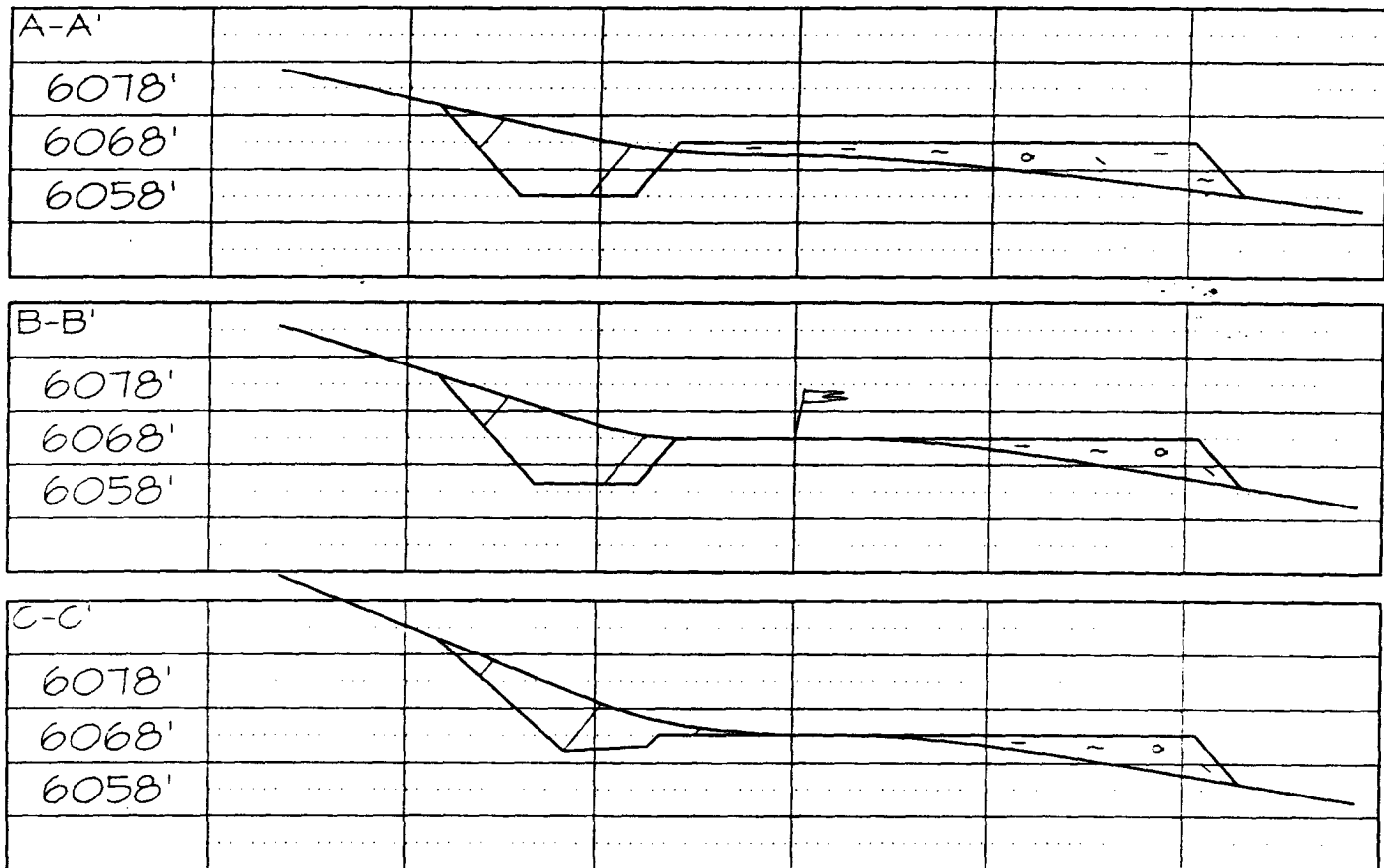
MAR 06 2006

Conditions of Approval (if any):

**BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN #23S**  
**2265' FNL & 1705' FWL, SECTION 33, T29N, R9W, NMPM, SAN JUAN COUNTY, NM**  
**GROUND ELEVATION: 6068' DATE: JANUARY 12, 2006**



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 #23S  
**Location:** Unit F (SENW) 2265' FNL & 1705' FWL, Section 33, T29N, R9W  
 San Juan County, New Mexico  
 Latitude 36.68335° N; Longitude 107.79020° W  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6068' GR

Formation:	Top	Bottom	Contents
Surface	San Jose		
Ojo Alamo	1389'		
Kirtland	1425'	2161'	gas
T/Fruitland	2161'		gas
Pictured Cliffs	2403'		
<b>Total Depth</b>	<b>2603'</b>		

**Note:** The Total Depth for this well is into the Pictured Cliffs interval, but currently only have plans to complete the Fruitland Coal interval. We could in the near future perforate/stimulate the Pictured Cliffs interval, but only would once Regulatory approval was asked for and received.

**Logging Program:** Newton-Density to surface.

**Mud Program:**

Interval	Type	Weight	Vis. Fluid Loss
0- 120'	Spud	8.4-8.9	40-50 no control
120-2603'	air/air-mist Non-dispersed	8.4-9.5	30-60 no control

**Casing Program:**

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
8 3/4"	0 - 120'	7"	20.0#	J-55
6 1/4"	0 - 2603'	4 1/2"	10.5#	J/K-55

**Tubing Program:**

0 - 2603'	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 @ 1425'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1425'. 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.

February 9, 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 130 sx (276 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 400 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~~ <sup>BOPE</sup> to 600 psi/30 min.

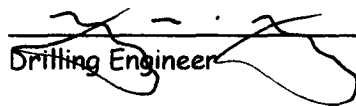
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

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:**

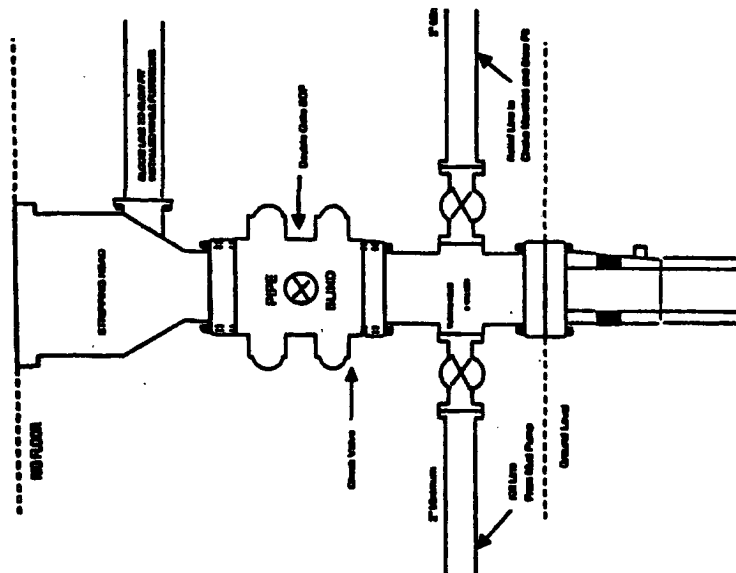
- \* The Fruitland Coal formation will be completed.
- \* Anticipated pore pressure for the Fruitland is between 600 - 700 psi.
- \* This gas is dedicated.
- \* The west half of section 33 is dedicated to Fruitland Coal.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

  
Drilling Engineer

2/13/06  
Date

## BURLINGTON RESOURCES

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

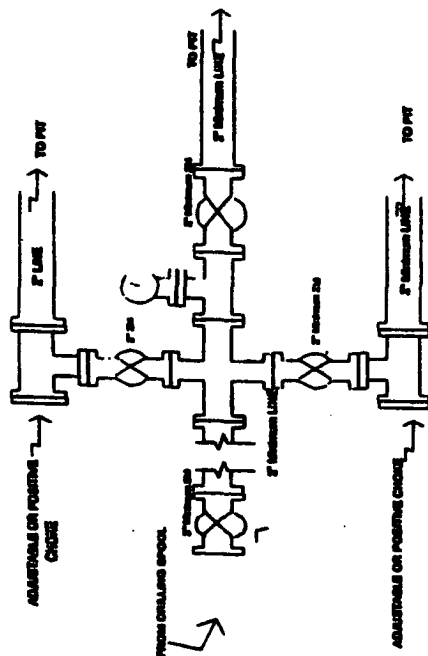


**Minimum BOP installation for all Compaction/Maintenance Operations. 7-1/8" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All stripping equipment to 2000 psi working pressure or greater excluding 500 psi stripping head.**

**Exhibit #2**

## BURLINGTON RESOURCES

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

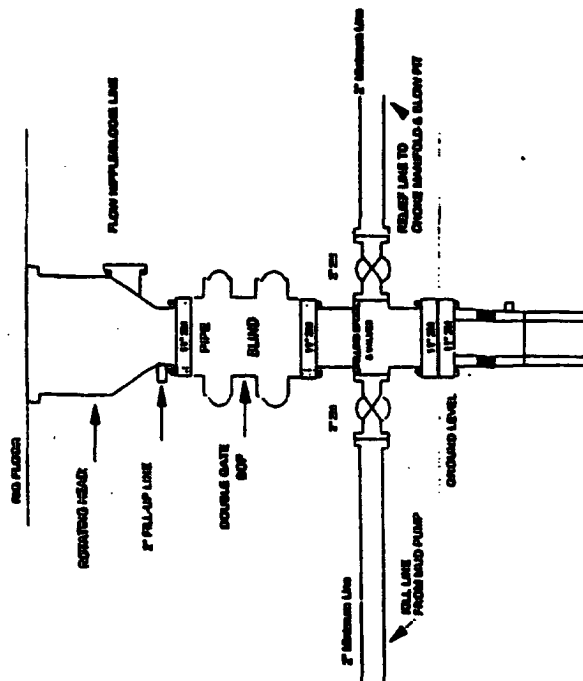


**Choose manifold installation from Surface Curing  
Point to Total Depth. 2,000psi working pressure  
equipment with two choices.**

**Figure #3**

## Burlington Resources

## Drilling Rig 2000 psi System



BOP Isolation from Surface Casing Point to Total Depth, 11" Bore 10" Nominal, 2000 psi working pressure enables gas BOP to be equipped with blind rams and pipe rams. A BOP psi rating based on top of ram preventers. All BOP equipment is 2,000 psi and working pressure

### Figure #1