

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 MAY 10 PM 9 12

1a. Type of Work  
DRILL

5. Lease Number

NMSF-080117

RECEIVED

Unit Reporting Number

NMNM-0783946

200 FARMINGTON NM

1b. Type of Well  
GAS

6. If Indian, All. or Tribe

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

7. Unit Agreement Name

Huerfano Unit

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

8. Farm or Lease Name

9. Well Number  
#74R

4. Location of Well  
Unit A (NENE), 665' FNL, 1165' FEL

10. Field, Pool, Wildcat  
Basin Dakota, Blanco MV

Latitude 36° 32.2295'N  
Longitude 107° 46.2192'W

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, Drig, Compl, or Applied for on this Lease  
400' - Huerfano 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: Alvaro Sandoval  
Regulatory Analyst

5-9-06  
Date

PERMIT NO.

APPROVAL DATE

APPROVED BY D. Montecinos

TITLE

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.

It is the responsibility of the applicant to ensure that all required archaeological and threatened and endangered species reports are submitted with this application. Failure to do so will result in denial of the application.

The application is subject to technical and procedural review pursuant to 43 CFR 3160.3 and appeal pursuant to 43 CFR 3165.4.

AMOCO

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

District II  
PO Drawer D0, 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

RECEIVED  
WELL LOCATION AND ACREAGE DEDICATION PLAT  
070 FARMINGTON PLAT

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

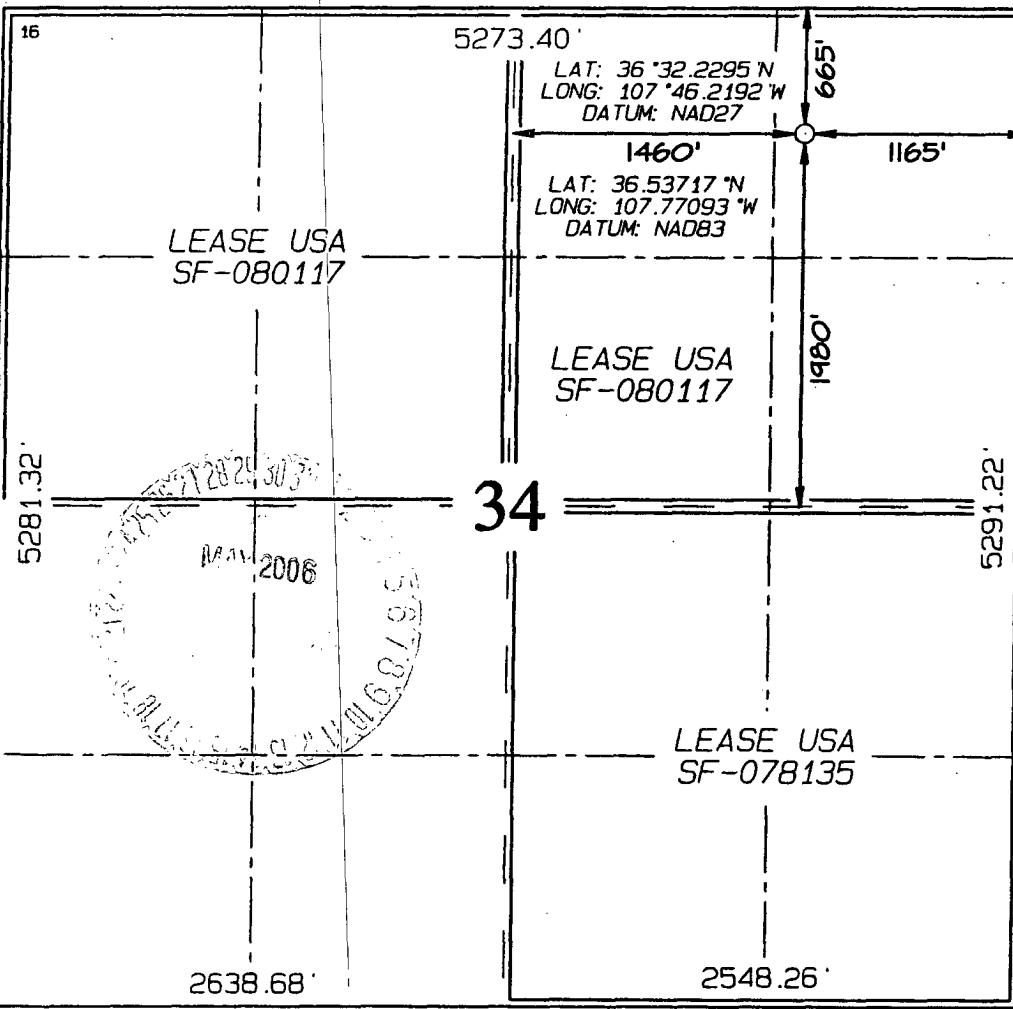
<sup>10</sup> Surface Location

UL or Lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	34	27N	9W		665	NORTH	1165	EAST	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
A									
<sup>12</sup> Dedicated Acres DK 320.0 ac N2 MV 320.0 ac E2					<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.

*Patsy Clugston*  
Signature

**Patsy Clugston**

Printed Name

**Sr. Regulatory Specialist**

Title

4/24/2006

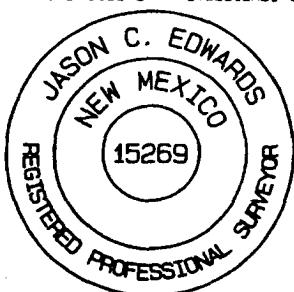
Date

<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.

Date of Survey: MARCH 1, 2006

Signature and Seal of Professional Surveyor



*JASON C. EDWARDS*  
Certificate Number 15269

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.

30-045-06148

5. Indicate Type of Lease

STATE

FEE

6. State Oil & Gas Lease No.

SF-080117

7. Lease Name or Unit Agreement Name

Huerfanito Unit

8. Well Number

74R

9. OGRID Number

14538

10. Pool name or Wildcat

Basin Dakota / Blanco Mesaverde

**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 >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

### SUBSEQUENT REPORT OF:

REMEDIAL WORK  
COMMENCE DRILLING OPNS.  
CASING/CEMENT JOB

ALTERING CASING  
P AND A

OTHER:

New Drill

OTHER:

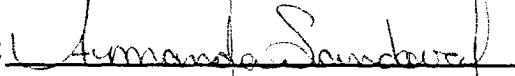
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

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 Analyst

DATE

5/9/2006

Type or print name  
For State Use Only

Amanda Sandoval

E-mail address: [asandoval@br-inc.com](mailto:asandoval@br-inc.com) Telephone No.

505-326-9700

APPROVED BY

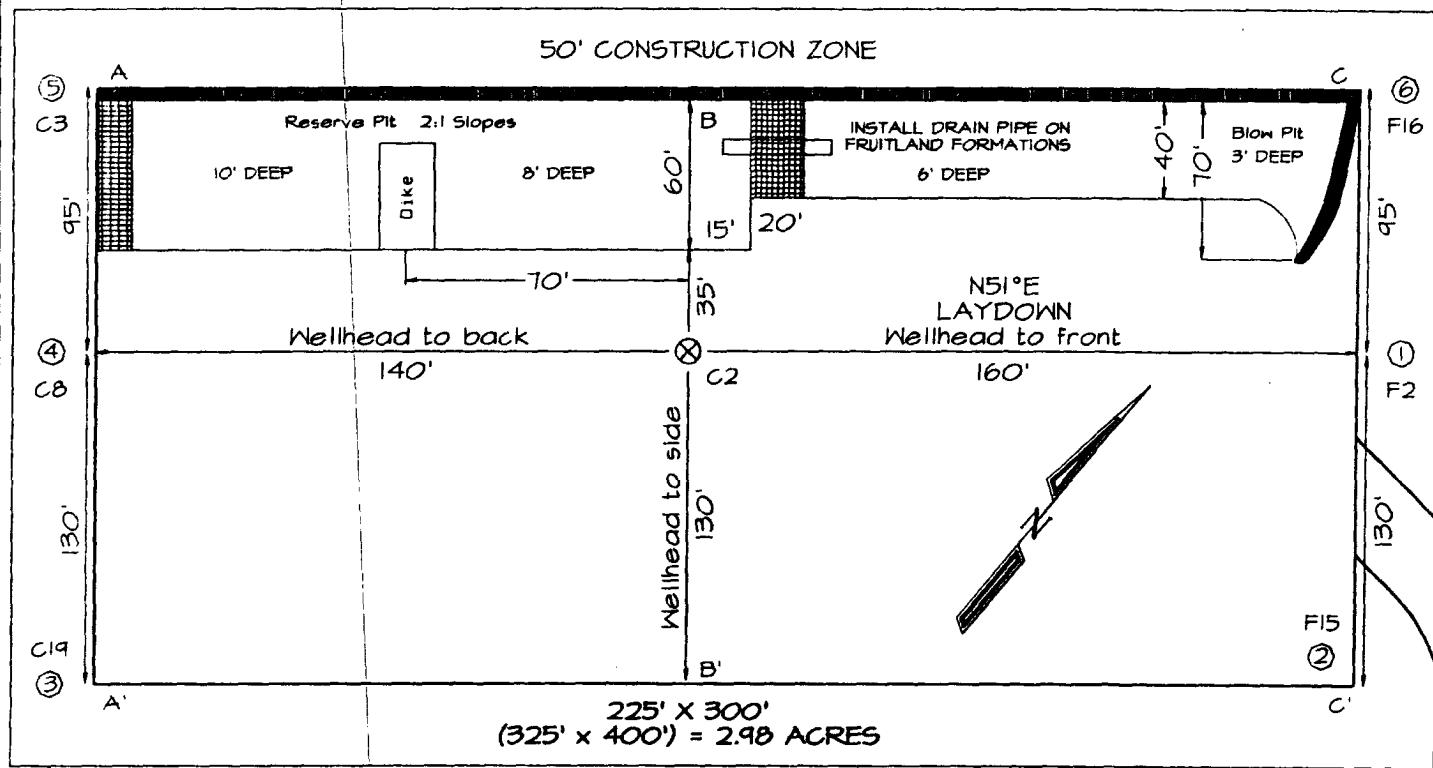
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DEPUTY OIL & GAS INSPECTOR, DIST. 3.

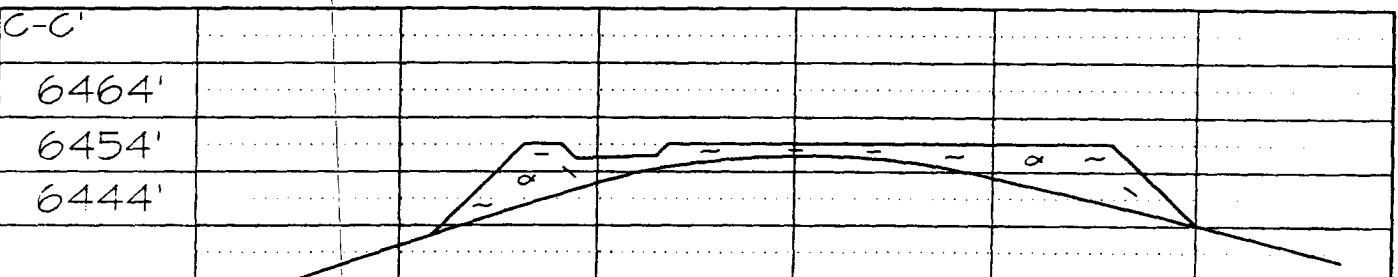
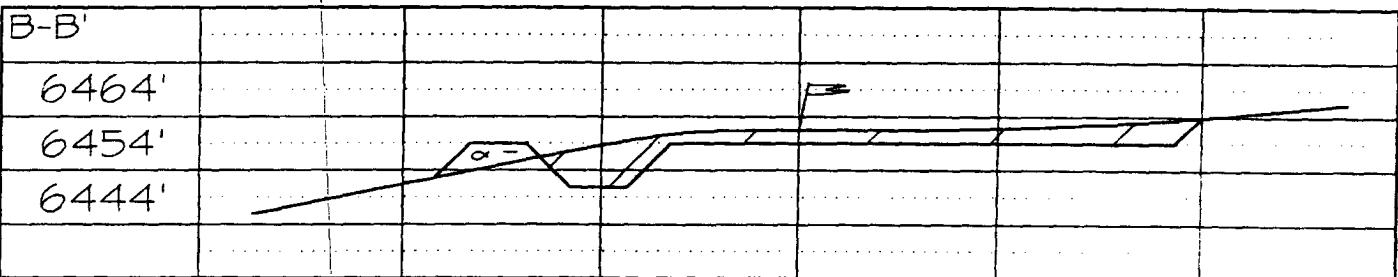
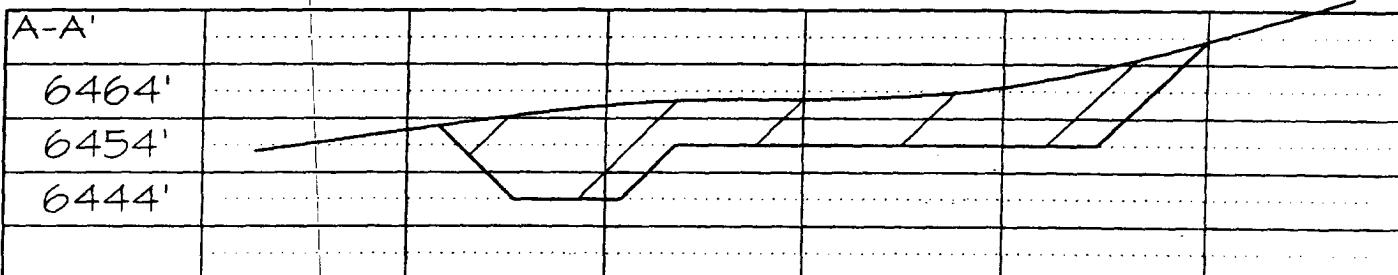
DATE

MAY 30 2006

Conditions of Approval (if any):



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.



ACCESS  
 200' (0-8%)

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 bloopie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The bloopie 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 bloopie line.
- Engines will have spark arresters or water cooled exhaust.

**Special Drilling Operations (Air/Mist Drilling):**

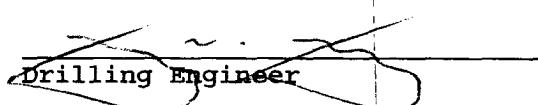
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

**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

Date

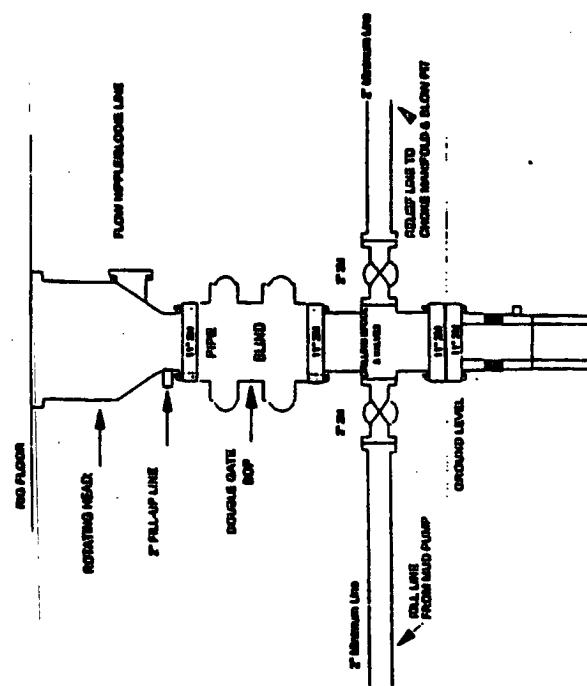
5/9/06

## BURLINGTON RESOURCES

BURLINGTON RESOURCES

Burlington Resources

## Drilling Rig Choke Manifold Configuration 2000 BOP System



**SGCP Installation from Surface Casting Point to Total Depth, 1st Bore**  
For November, 2000 and working from surface, the SGCP system was equipped with 100' of 10" pipe sections. A 100' rod section is used on top of these presentments. An SGCP equipment is 2,000 psi working pressure.

**Choke manifold installation from Surface Casting  
Point to Total Depth, 2,000psi working pressure  
equipment with two chokes.**

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4-20-01

presence of greater understanding and better living based on this. And, the emphasis on sound personal development

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4-20-01

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