

8

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2005 FEB 7 PM 5 12 RECEIVED 070 FARMINGTON NM	5. Lease Number NMSF-078604 Unit Reporting Number
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON RESOURCES</b> 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 Scott C 9. Well Number 1
4. Location of Well 660' FNL, 1345' FEL Latitude 36° 56.8286'N, Longitude 107° 55.1364'W		10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) Sec 31, T-32-N, R-10-W API # 30-045-32889
14. Distance in Miles from Nearest Town 15.8 Miles to Aztec Post Office	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 660'		
16. Acres in Lease	17. Acres Assigned to Well 318.46- E/2	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 367'		
19. Proposed Depth 7557	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6070 GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Frances Bend</u> Regulatory Specialist	<u>2-2-05</u> Date	

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.

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

NMOC

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

DISTRICT I  
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II  
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87504-2088

Form C-102

Revised June 10, 2003

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-32889		<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name Basin Dakota
<sup>4</sup> Property Code 34746	<sup>5</sup> Property Name SCOTT C		<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		<sup>9</sup> Elevation 6070'

<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
B	31	32-N	10-W	6	660	NORTH	1345	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
B									
<sup>12</sup> Dedicated Acres 318.46 E/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

LOT 8	LOT 7	LOT 6	LOT 5	LOT 4	LOT 3	LOT 2	LOT 1
LOT 9	LOT 10	LOT 11	LOT 12	LOT 13	LOT 14	LOT 15	LOT 16
LOT 17	LOT 18	LOT 19	LOT 20	LOT 21	LOT 22	LOT 23	LOT 24

FD 3 1/4" BC  
BLM 1969

N 89°56'51" W  
2634.47' (M)

LAT: 36°56.8286' N. (NAD 27)  
LONG: 107°55.1364' W. (NAD 27)

660'

1345'

S 00°10'16" E  
2608.72' (M)

RECEIVED  
070-FARMINGTON NM  
2005 FEB 7 PM 5 12

31

MAR 2005

NMSF-078604

FD 3 1/4" BC  
BLM 1969

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

11/4/04  
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 belief.

OCT 2004  
Date of Survey

*JOHN A VUKONICH*  
Signature and Title of Professional Surveyor

NEW MEXICO  
REGISTERED PROFESSIONAL SURVEYOR  
14831

Certificate Number

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-

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil &amp; Gas Lease No.

Federal - SF-078213

7. Lease Name or Unit Agreement Name

Scott C

8. Well Number

#1

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 &amp; GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter B : 660 feet from the North line and 1345 feet from the East lineSection 31 Township 32N Range 10W NMPM County San Juan

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

6070' GL

Pit or Below-grade Tank Application

☐ or Closure ☐

Pit type

New Drill

Depth to Groundwater

&gt;50'

Distance from nearest fresh water well

&gt;1000'

Distance from nearest surface water

&lt;1000'

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 ☐

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, Lined:

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

Patsy Clugston

TITLE

Sr. Regulatory Specialist

DATE

12/6/2004

Type or print name

Patsy Clugston

E-mail address:

pclugston@br-inc.com

Telephone No.

505-326-9518

For State Use Only

DEPUTY OIL &amp; GAS INSPECTOR, DIST. 68

APPROVED BY

[Signature]

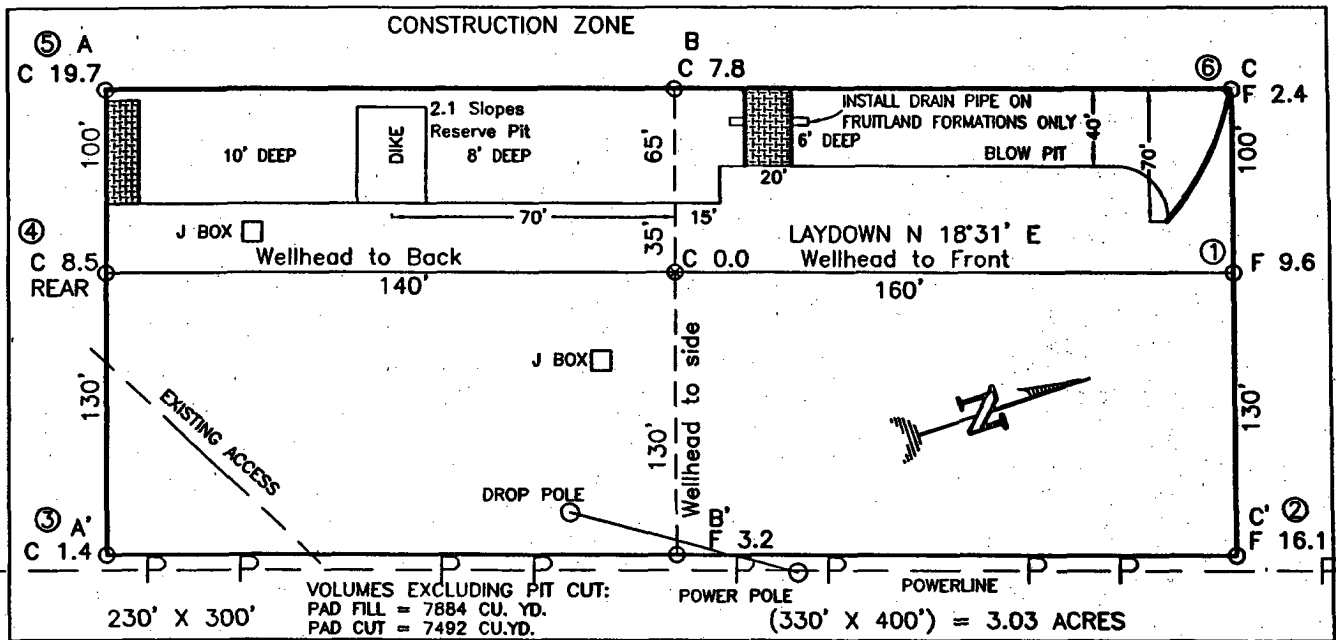
TITLE

DATE

MAR 28 2005

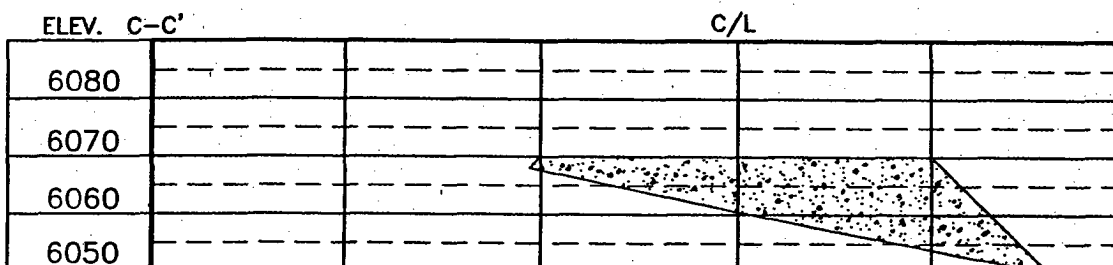
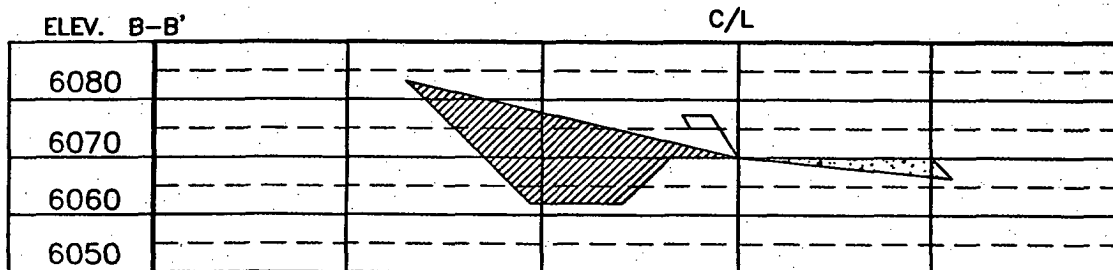
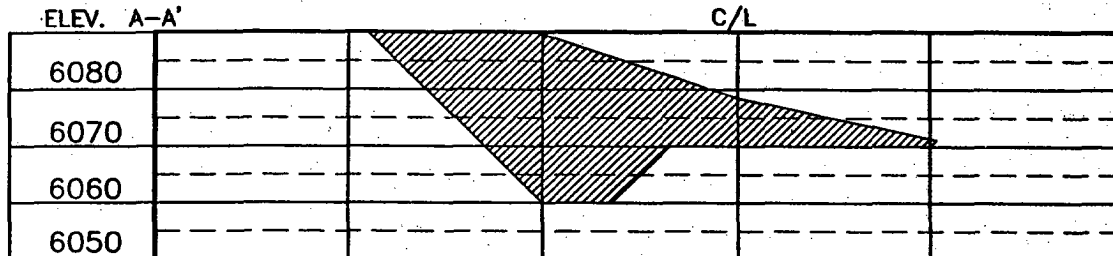
Conditions of Approval (if any):

**BURLINGTON RESOURCES OIL & GAS COMPANY LP**  
**SCOTT C No. 1, 660 FNL 1345 FEL**  
**SECTION 31, T-32-N, R-10-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO**  
**GROUND ELEVATION: 6070, DATE: OCTOBER 5, 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:	REVISION BY:	<b>Daggett Enterprises, Inc.</b> Surveying and Oil Field Services P. O. Box 15088 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO P.L.S. No. 14831 CADFILE: BR528CF8 DRAWN BY: A.G. DATE: 11/02/04



ROW: BR528

## OPERATIONS PLAN

Well Name: Scott C #1

Location: Unit B (NWNE/4), 660' FNL & 1345' FEL, Sec. 31, T32N, R10W  
San Juan County, NM  
Latitude 36° 56.8286' N Longitude 107° 55.1364' W

Formation: Basin Dakota

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1157'	----
Ojo Alamo	1157'	1197'	aquifer
Kirtland	1197'	2622'	gas
Fruitland	2622'	2892'	gas
Pictured Cliffs	2892'	3060'	gas
Lewis	3060'	3572'	gas
Intermediate TD	3160'	---	
Huerfanito Bentonite	3572'	4004'	gas
Chacra	4004'	4702'	gas
Massive Cliff House	4702'	4779'	gas
Menefee	4779'	5182'	gas
Pt Lookout	5182'	5492'	gas
Mancos	5492'	6479'	gas
Gallup	6479'	7326'	gas
Two Wells	7326'	7404'	gas
Paguate	7404'	7432'	gas
Upper Cubero	7432'	7497'	gas
Encinal	7497'	---	
TD	7557		

Logging program:

Cased hole - CBL-CCL-GR - TD to surface  
Cores - none

Alternate Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
120- Intermediate TD	LSND/Polymer/Starch	8.4-9.0	30-60	no control
Intermediate TD - TD	Air/Air Mist/Nitrogen	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

**Alternate 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'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3160'	7"	20.0#	J-55/N-80
6 1/4"	0' - 7557'	4 1/2"	10.5#	J-55/N-80

**Tubing Program:**

7557'                      2 3/8"                      4.7#                      J-55

**BOP Specifications, Wellhead and Tests: for Dakota &/or Mesaverde/Dakota and/or Mesaverde****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 E

**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.

BOP E

**Surface to Total Depth:**

2" nominal, 2000 psi minimum choke manifold (Reference Figure #2).

**Completion Operations:**

7 1/16" 2000 psi double gate BOP stack (Reference Figure #3). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 1500 psi for 30 minutes.

**Wellhead:**

9 5/8" x 7" x 4 1/2" x 2 3/8" x 2000 psi tree assembly (9-5/8" X 7" X 2-3/8" X 2000 psi tree for MV only).

**General Information:**

- 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 drilling crew.
- All BOP tests and 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 sxs 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.

**9 5/8" surface casing conventionally drilled:**

Cement with 88 sx (1.28 yield - 113 cf) 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.

**7" intermediate casing:**

Cement Lead with 272 sx (2.13 yield = 579 cf) 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 sx (1.38 yield = 124 cf) Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (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 - Cement with 13 sx (2.13 yield = 28 cf) Premium Lite w/3% CaCl, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% FL-52 and 0.4% SMS. Tail - cement with 90 sx (1.38 yield = 124 cf) Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: cement with 258 sx (2.13 yield = 550 cf) Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (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 other joint off bottom, to the base of the Ojo Alamo. Two turbolating centralizers at the base of the Ojo Alamo. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

**4 1/2" Production Liner/Casing:**

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 303 sx (1.97 yield = 598 cf) Premium Lite HS FM w/0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52 (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.

- 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 (Gas/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.
- Deduster equipment will be utilized.
- 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:**

- This is a single completion Dakota well.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:
  - Fruitland Coal 700 psi
  - Pictured Cliffs 325 psi
  - Mesa Verde 1100 psi
  - Dakota 1900 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- This gas is dedicated.

  
Drilling Engineer

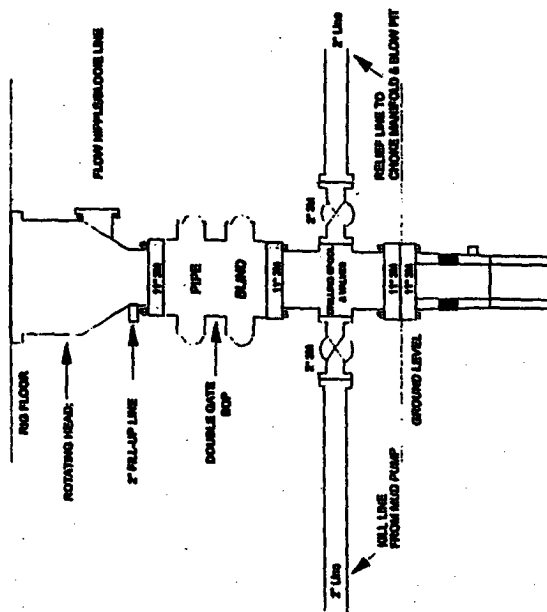
2-4-05  
Date



## Burlington Resources

## Drilling Rig

## 3000 psi System



### Figure #1

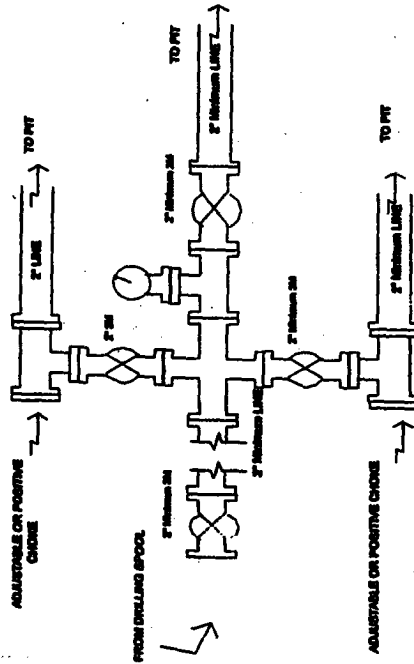
BOP installation from Surface Casing Point to Total Depth, 11" Bore 10" Nominal, 3,000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rotating head on top of ram preventers. All BOP equipment is 3,000 psi working pressure.

**4-20-01**

## BURLINGTON RESOURCES

## Drilling Rig

## Choke Manifold Configuration 3000 psi System



## Figure #2

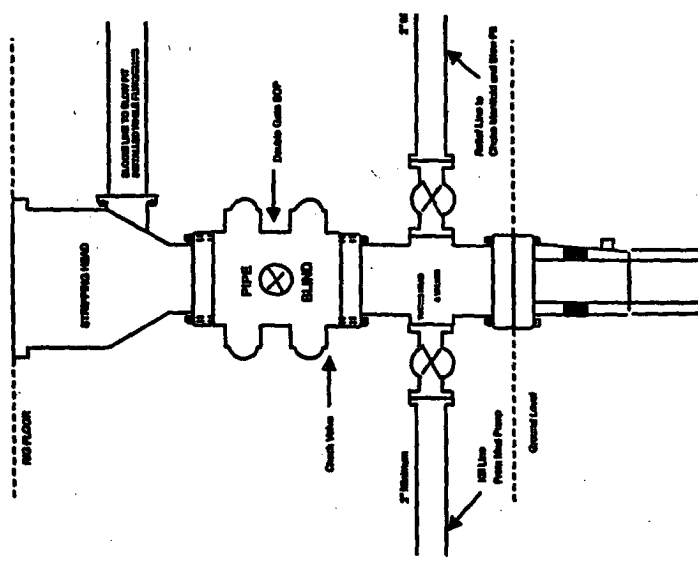
**Choke manifold installation from Surface Casing Point to Total Depth. 3,000psi working pressure equipment with two choices.**

4-20-01

## BURLINGTON RESOURCES

### Completion/Workover Rig

## BOP Configuration 3,000 psi System



**Figure #3**

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 snatching head to be installed on the top of the BOP. All BOP equipment is 3000 psi working pressure or greater excluding 500 psi snatching head.

**4-20-01**