

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

JUN 2006

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2004 SEP 30 PM 10:09 RECEIVED 070 FARMINGTON NM	5. Lease Number NM-04226 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 McManus 9. Well Number 13R
4. Location of Well 1810' FSL, 1445' FWL Latitude 36° 25.6529 , Longitude 107° 41.4371		10. Field, Pool, Wildcat Ballard Pictured Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) K Sec. 4, T25N, R8W API # 30-045-32604
14. Distance in Miles from Nearest Town 35 miles to Bloomfield PO	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1445'		
16. Acres in Lease	17. Acres Assigned to Well PC SW/160	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 2657'		
19. Proposed Depth 2295'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6481'	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Joni Clark</u> Regulatory/Compliance Specialist	Date <u>3/19/04</u>	

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY Original Signed: Stephen Mason TITLE \_\_\_\_\_ DATE JUN 12 2006

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.

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

NMOCGD

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

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

DISTRICT II  
811 South First, Artesia, N.M. 88210

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

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

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039- 32604	<sup>2</sup> Pool Code 71439	<sup>3</sup> Pool Name Ballard Pictured Cliffs
<sup>4</sup> Property Code 7309	<sup>5</sup> Property Name McMANUS	<sup>6</sup> Well Number 13R
<sup>7</sup> GRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	<sup>9</sup> Elevation 6481'

<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
K	4	25-N	8-W		1810'	SOUTH	1445'	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
<sup>12</sup> Dedicated Acres PC SW/160					<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 4	LOT 3	LOT 2	LOT 1
FD 3 1/4" B.L.M. BC 1954			
USA NM-04226			
1445'	LAT: 36°25.6529' N. (NAD 27) LONG: 107°41.4371' W. (NAD 27)		
N 00-12-33 E 2639.24' (M)	1810'		
FD 3 1/4" B.L.M. BC 1954	S 89-23-50 E 2614.08' (C)	CALC'D CORNER WITNESS CORNER FD 3 1/4" BC BLM 1954 N 89-23-50 W 99.0' (C)	

<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

Joni Clark  
Signature  
Joni Clark  
Printed Name  
Regulatory Specialist  
Title  
3-19-04  
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.

3-15-04  
Date of Survey  
Signature and Seal of Professional Surveyor:  
DAVID A. JOHNSON  
NEW MEXICO  
REGISTERED PROFESSIONAL SURVEYOR  
14827  
Certificate Number

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  
March 4, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. 30-045- <u>32604</u>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. NMNM-04226
7. Lease Name or Unit Agreement Name McManus
8. Well Number 13R
9. OGRID Number 14538
10. Pool name or Wildcat Ballard Pictured Cliffs

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. 30<sup>th</sup> Street, Farmington, NM 87402

4. Well Location

Unit Letter K : 1810 feet from the South line and 1445 feet from the West line

Section 4 Township 25N Range 8W NMPM San Juan County, NM

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

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL K Sect 4 Twp 25N Rng 8W Pit type New Depth to Groundwater >100' Distance from nearest fresh water  
well >1000' Distance from nearest surface water >1000' Below-grade Tank Location UL        Sect        Twp        Rng        ;  
       feet from the        line and        feet from the        line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: New Drill Pit ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

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.

Burlington Resources proposes to construct a new drill pit. The new drill pit will be an unlined pit as detailed in Burlington's general pit construction plan dated April 26, 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 ☐.

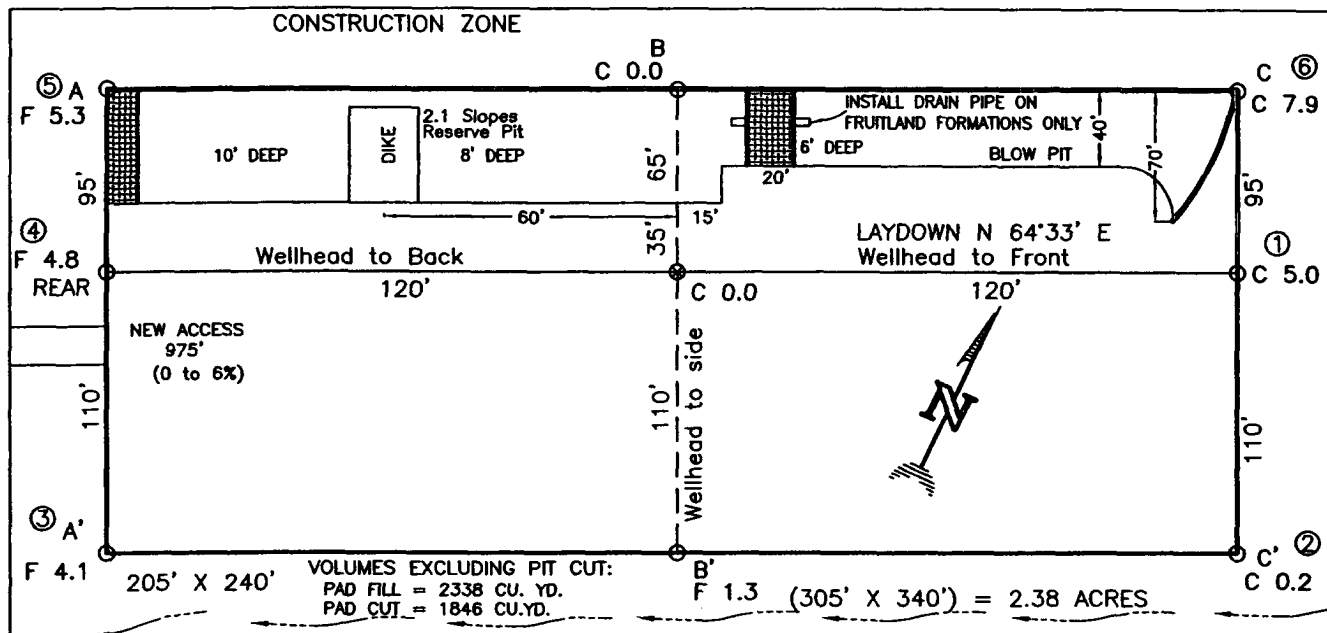
SIGNATURE Joni Clark TITLE Regulatory Specialist DATE 9/28/04

Type or print name Joni Clark E-mail address jclark@br-inc.com Telephone No. 326-9700

(This space for State use)

APPROVED BY [Signature] TITLE CITY CL & GAS INSPECTOR, DIST. 1 DATE JUN 13 2006  
Conditions of approval, if any

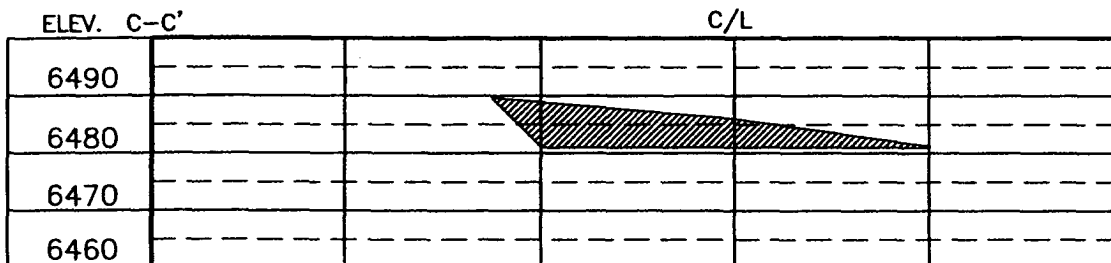
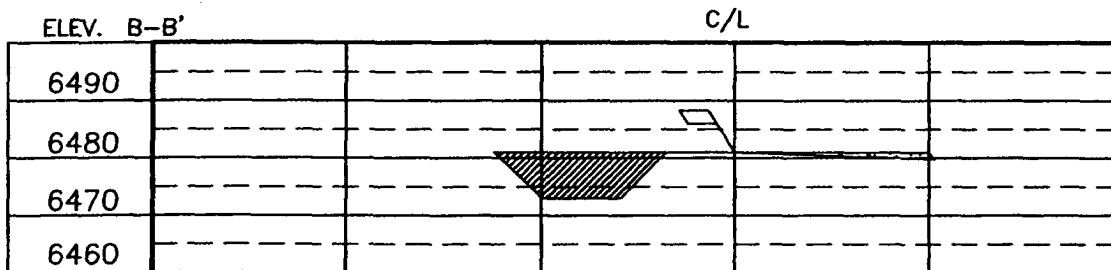
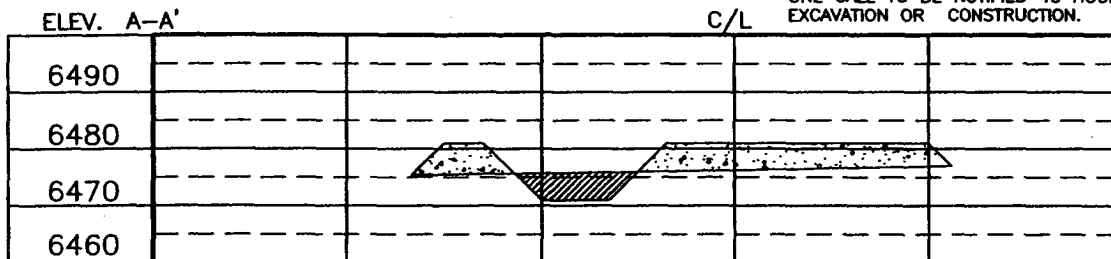
**BURLINGTON RESOURCES OIL & GAS COMPANY LP**  
**McMANUS No. 13R, 1810 FSL 1445 FWL**  
**SECTION 4, T-25-N, R-8-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO**  
**GROUND ELEVATION: 6481, DATE: FEBRUARY 19, 2004**



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.

DRAWN BY: A.G. ROW# BR482	RESTAKE LOCATION	DATE: 3/03/04	DESIGNED BY: B. LEBBY
		Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15088 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO L.S. No. 14827 CIRCLE BR482C78	
		DATE: 10/28/03	

## OPERATIONS PLAN

**Well Name:** McManus #13R  
**Location:** 1810' FSL, 1445' FWL, Section 4, T-25-N, R-8-W  
San Juan County, New Mexico  
Latitude 36° 25.6529'N', Longitude 107° 41.4371'W  
**Formation:** Ballard Pictured Cliffs  
**Elevation:** 6481' GL

<b>Formation:</b>	<b>Top</b>	<b>Bottom</b>	<b>Contents</b>
Surface	San Jose	1303'	
Ojo Alamo	1303'	1468'	aquifer
Kirtland	1468'	1845'	gas
Fruitland Coal	1845'	2095'	gas
Base of Basal Coal	2095'	2281'	gas
Pictured Cliffs	2281'		gas
Total Depth	2295'		

**Logging Program:**

Mud log - none  
Open hole - none  
cased hole - GR/CBL

**Coring Program:** None

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud	8.4-9.0	40-50	no control
120-2295'	FW	8.4-9.0	32-45	no control

**Casing Program (as listed, equivalent, or better):**

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
8 3/4"	0 - 120'	7"	20.0#	J-55
6 1/4"	0 - 2295'	4 1/2"	10.5#	J-55

**Tubing Program:**

0' -2295'	2 3/8"	4.7#	J-55
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**Float Equipment:** 7" surface casing - saw tooth guide shoe.  
Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - float shoe on bottom. Standard centralizers run every other joint above shoe to the base of the Ojo Alamo @ 1468'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1468'. 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" 2000 psi screw on independent wellhead.

**Cementing:**

7" surface casing pre-set drilled- cement with 34 sxs Type III 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 conventionally drilled - cement with 43 sxs Type III cement with 0.25 pps Celloflake, 3% calcium chloride (54 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.

4 1/2" production casing - Lead w/109 sx Premium Lite cement w/3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sx Type III cement w/1% calcium chloride, 0.25 pps celloflake, and 0.2% fluid loss (356 cu.ft. of slurry, 50% excess to circulate to surface).

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

**BOP and tests:**

Surface to TD - 7 1/16" 2000 psi (minimum) single spherical annular BOP stack (Reference Figure #1). Prior to drilling out surface casing, test BOP and casing to 400 psi/30 min.


Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test BOP and casing to 2000 psi/15 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 Pictured Cliffs formation will be completed.
- \* Anticipated pore pressure for the Pictured Cliffs is 500 psi.
- \* This gas is dedicated.
- \* The southwest quarter of Section 4 is dedicated to the Pictured Cliffs.

  
Drilling Engineer

9/28/04  
Date

# 2000 psi BOP System

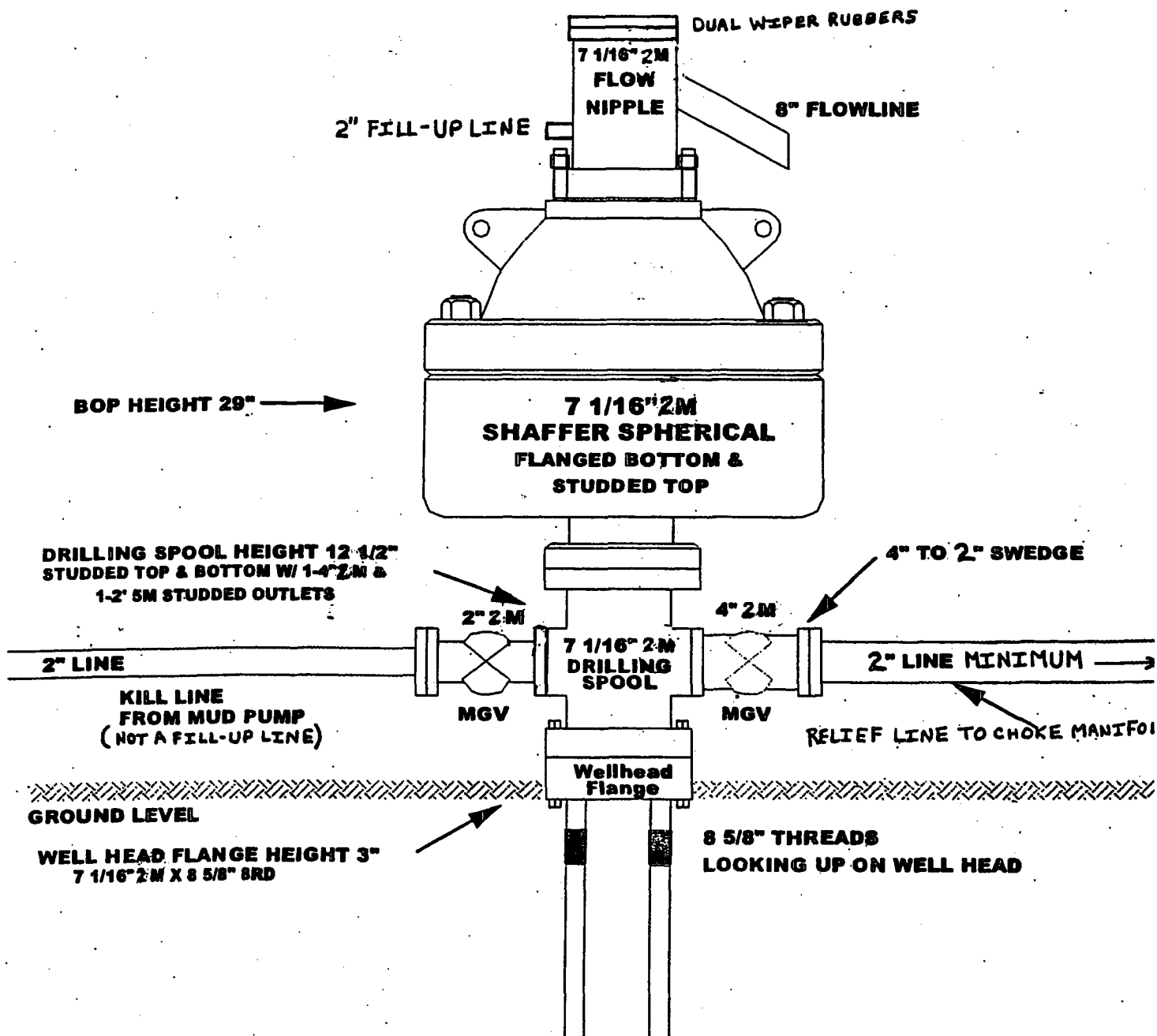
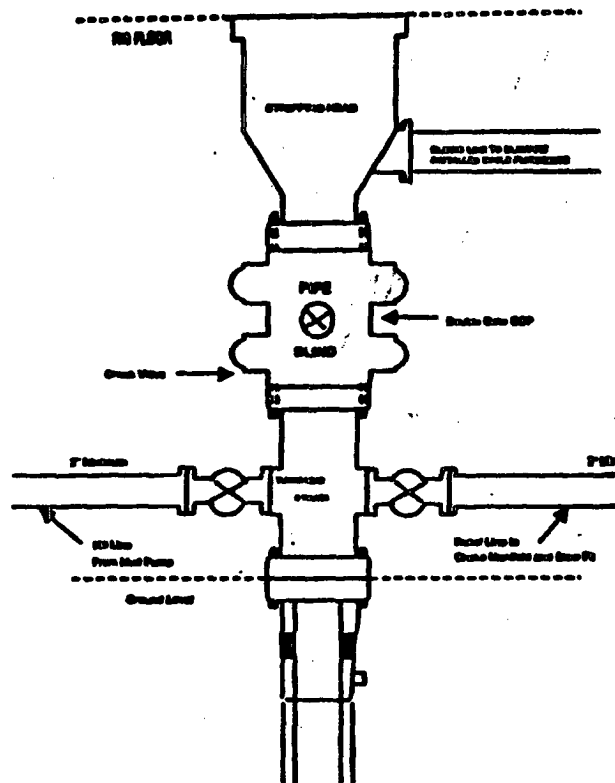


FIGURE 1

## BURLINGTON RESOURCES

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



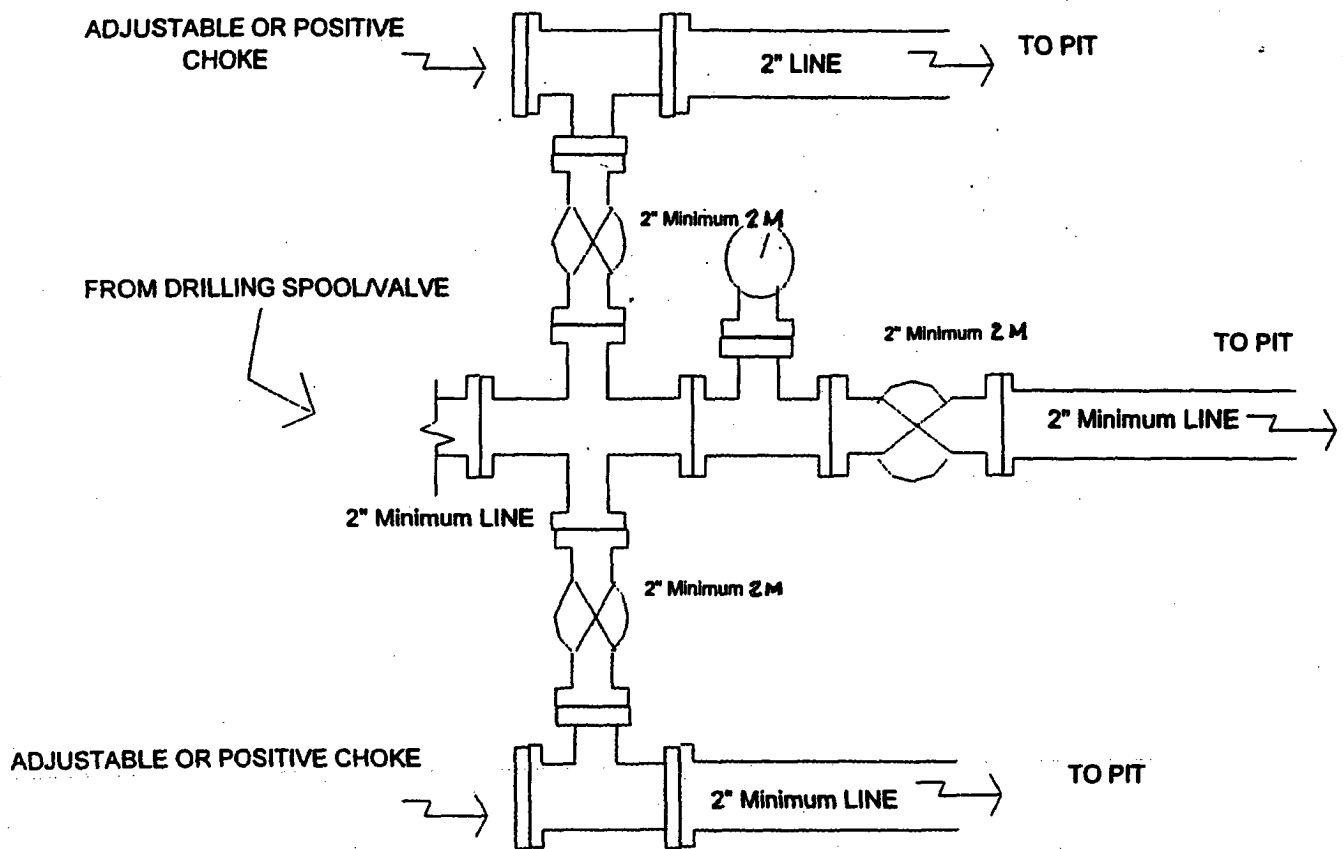
Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi stripping head.

Figure #2



# BURLINGTON RESOURCES

## Drilling Rig Choke Manifold Configuration 2000 psi System



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