

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-078503 Unit Reporting Number OTO FARMINGTON NM
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON 14538 RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 29-7 Unit 7465
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number #112N
4. Location of Well Unit N (SESW), 160' FSL, 1930' FWL Latitude 36° 41.4117'N Longitude 107° 35.7665'W	10. Field, Pool, Wildcat Blanco Mesaverde/ Basin Dakota 12319 71599 11. Sec., Twn, Rge, Mer. (NMPM) N Sec. 29, T29N, R07W API # 30-039-29743
14. Distance in Miles from Nearest Town 19.2 miles to Blanco, NM	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 160'	
16. Acres in Lease	17. Acres Assigned to Well 320 W2 MV/DK
18. Distance from Proposed Location to Nearest Well, Drig. Compl. or Applied for on this Lease 1502' - San Juan 29-7 Unit #112	
19. Proposed Depth 7672'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6491' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u><i>Amanda Sandoval</i></u> Regulatory Compliance Assistant II	<u>1-10-06</u> Date

PERMIT NO.

APPROVAL DATE

APPROVED BY *Jim Lovato*

TITLE

Acting AFM

DATE

1/27/06

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.

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

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

NMOCD

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

DISTRICT II
1301 W. Grand Ave., 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 87505

Form C-102
Revised June 10, 2003

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

2005 JAN 11 AM 8 07

☐ AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039 - 29743	*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 7465	*Property Name SAN JUAN 29-7 UNIT	*Well Number 112N
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	*Elevation 6491

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
N	29	29-N	7-W		160	SOUTH	1930	WEST	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
*Dedicated Acres 320 W/2			*Joint or Infill		*Consolidation Code		*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

FD 2 1/2" GLO BC. 1913	NMSF-078503	29
N 00-01-08 W 2635.65' (M)	LAT. 36°41.4117 N. (NAD 27) LONG. 107°35.7665 W. (NAD 27)	
FD 2 1/2" GLO BC. 1913 1930'	N 89-42-46 W 2640.22' (M)	FD 2 1/2" GLO BC. 1913
	160'	

¹⁷ OPERATOR CERTIFICATION

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

Frances Bond
Signature

Frances Bond
Printed Name
Regulatory Specialist
Title

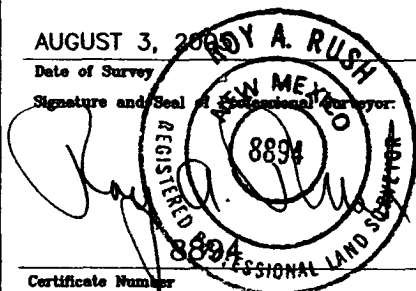
1-10-06
Date

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.

AUGUST 3, 2005
Date of Survey

Signature and Seal of Registered Surveyor



Certificate Number

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

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

May 27, 2004

<p>SUNDRIY 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.)</p>		<p>WELL API NO. 30-039-29743</p>
<p>1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other</p>		<p>5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/></p>
<p>2. Name of Operator BURLINGTON RESOURCES OIL & GAS COMPANY LP</p>		<p>6. State Oil & Gas Lease No. NMSF-078503</p>
<p>3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402</p>		<p>7. Lease Name or Unit Agreement Name San Juan 29-7 Unit</p>
<p>4. Well Location Unit Letter N : 160 feet from the South line and 1930 feet from the West line Section 29 Township 29N Range 7W NMPM County Rio Arriba</p>		<p>8. Well Number 112N</p>
<p>11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6491'</p>		<p>9. OGRID Number 14538</p>
<p>Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/></p>		<p>10. Pool name or Wildcat Blanco Mesaverde/Basin Dakota</p>
<p>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 mill Below-Grade Tank: Volume bbls; Construction Material</p>		

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 COMPL ☐

OTHER: **New Drill** ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/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.

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.

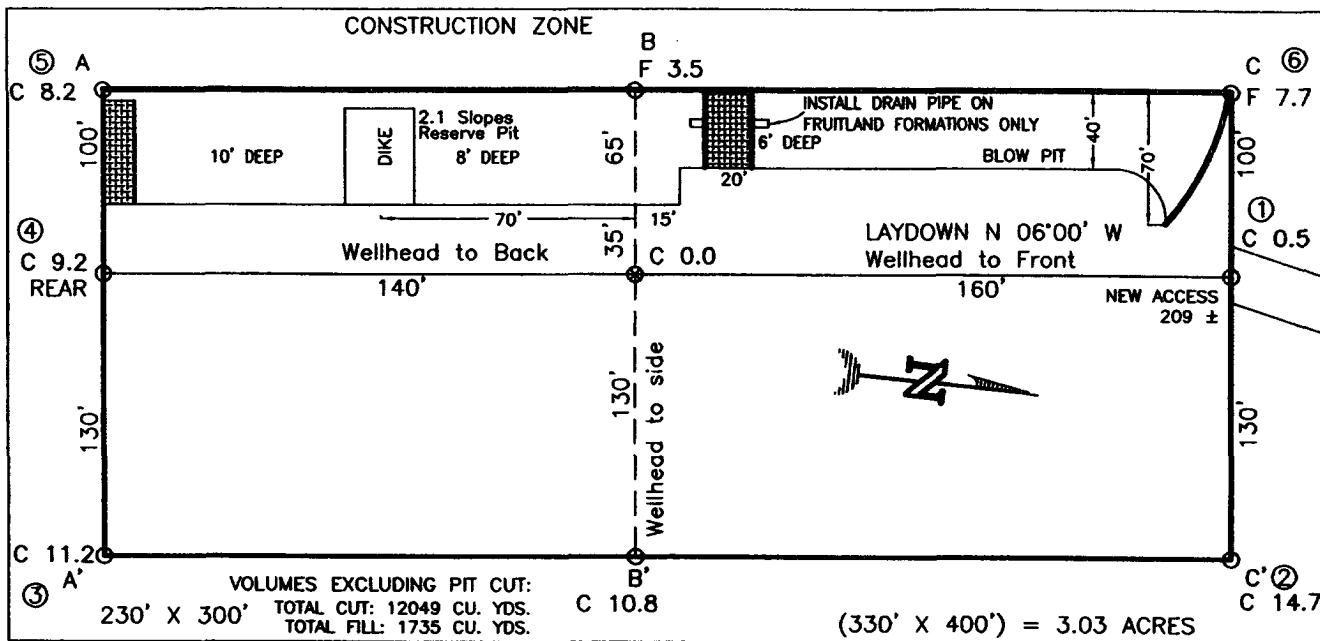
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Amanda Sandoval TITLE **Regulatory Assistant II** DATE **9/28/2005**

Type or print name **Amanda Sandoval** E-mail address: **assandoval@br-inc.com** Telephone No. **505-326-9891**
For State Use Only

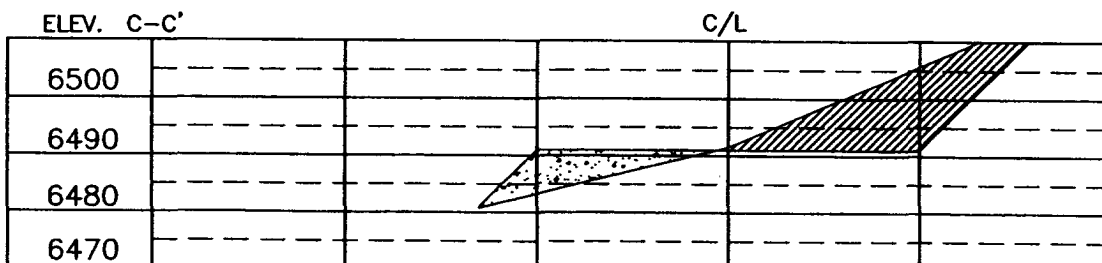
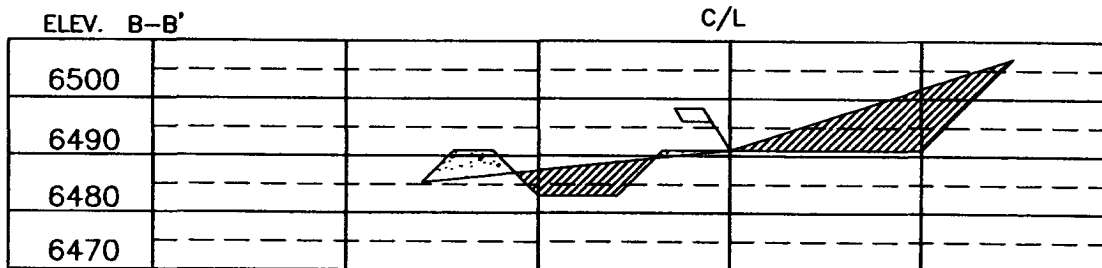
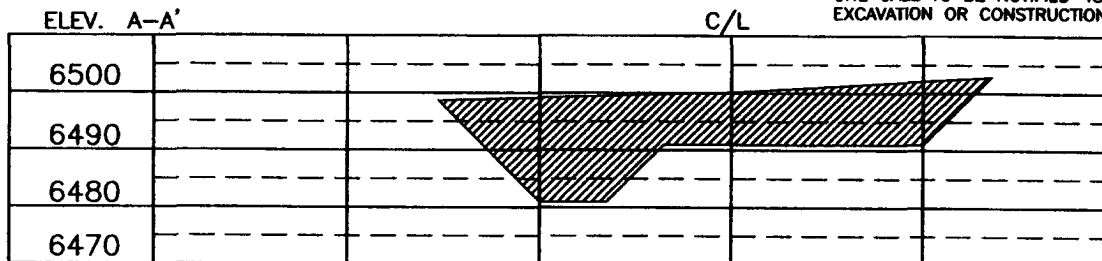
APPROVED BY [Signature] TITLE **DEPUTY OIL & GAS INSPECTOR, DIST. 4** DATE **JAN 30 2006**
Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP
SAN JUAN 29-7 UNIT No. 112N, 160 FSL 1930 FWL
SECTION 29, T-29-N, R-7-W, N.M.P.M., RIO ARriba COUNTY, NEW MEXICO
GROUND ELEVATION: 6491, DATE: AUGUST 3, 2005



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:	REVISED BY:

Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 15068 • Farmington, NM 87401
 Phone (505) 326-1772 • Fax (505) 326-6019
 NEW MEXICO L.S. No. 8894
 GABRIEL BRISQ
 DATE 08/15/05

Drawn by: A.G.
 ROWE BRISQ

OPERATIONS PLAN

Well Name: SAN JUAN 29-7 UNIT 112N
Location: 160' FSL & 1930' FWL, Section 29 T29N R07W
Rio Arriba County, New Mexico
Formation: Blanco Mesaverde/Basin Dakota
Elevation: 6491' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2273'	
Ojo Alamo	2273'	2398'	aquifer
Kirtland	2398'	2985'	gas
Fruitland Coal	2985'	3190'	gas
Pictured Cliffs	3190'	3330'	gas
Lewis	3330'	3808'	
Huerfanito Bentonite	3808'		
Chacra	4151'	4826'	gas
Massive Cliff House	4826'	4951'	gas
Menefee	4951'	5391'	gas
Massive Point Lookout	5391'	5888'	gas
Mancos Shale	5888'	6631'	
Upper Gallup	6631'	7356'	gas
Greenhorn	7356'	7413'	gas
Graneros	7413'	7449'	gas
Two Wells	7449'	7579'	gas
Upper Cubero	7579'	7603'	gas
Lower Cubero	7603'	7672'	gas
Encinal	7672'	7672'	gas
Total Depth:	7672'		gas

Logging Program:

Open hole - none
Cased hole - Gamma Ray, CBL - surface to TD

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0 - 200'	Spud MUD/Air/Air Mist	8.4 - 9.0	40 - 50	no control
200- 3430'	LSND	8.4 - 9.0	30 - 60	no control
3430 - 7672'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

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' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3430'	7"	20/23#	J-55
6 1/4"	0' - 7672'	4 1/2"	10.5#	J-55

Tubing Program:

<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
0' - 7672'	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.

BOP

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

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 23 sx 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.

Conventionally Drilled - Cement with 88 sx Type III cement with 0.25 pps Celloflake, 2% CaCl. (113 cu ft of slurry, 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. 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. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -

Lead with 302 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 (124 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 w/21 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss. Tail w/90 Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: 281 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (599 cu ft - 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 @ 2398'. Two turbolating centralizers at the base of the Ojo Alamo @ 2398'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -

Pump 277 sxs Premium Lite HS FM w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (549 cu.ft., 30% excess to achieve 100' overlap in 4-1/2" x 7" annulus). WOC a minimum of 18 hrs prior to completing.

Cementing: Continued

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 formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

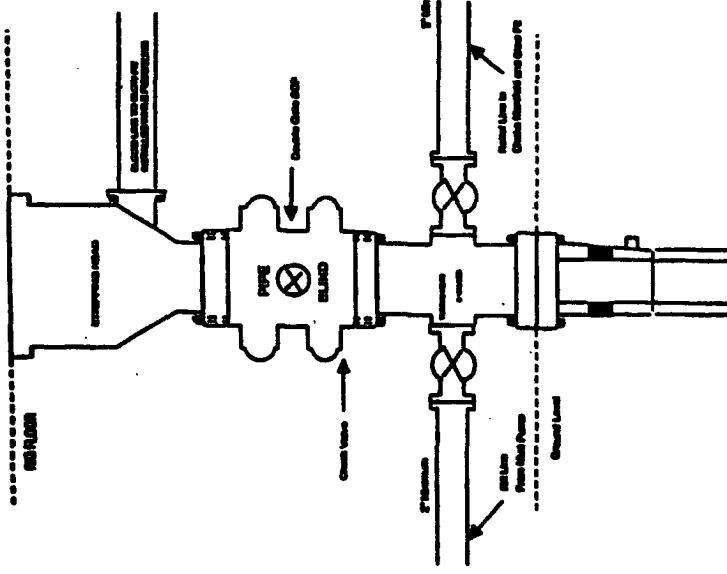
Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	2000 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of Section 29 is dedicated to the Mesa Verde formation and Dakota formation.
- This gas is dedicated.


Drilling Engineer

11/23/05
Date

BURLINGTON RESOURCES

Completion/Workover Rig
BOP Configuration
2,000 psi System

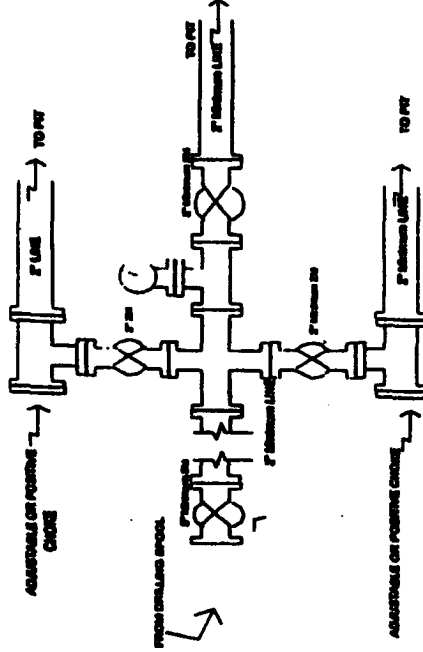


Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi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

Figure #2

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System

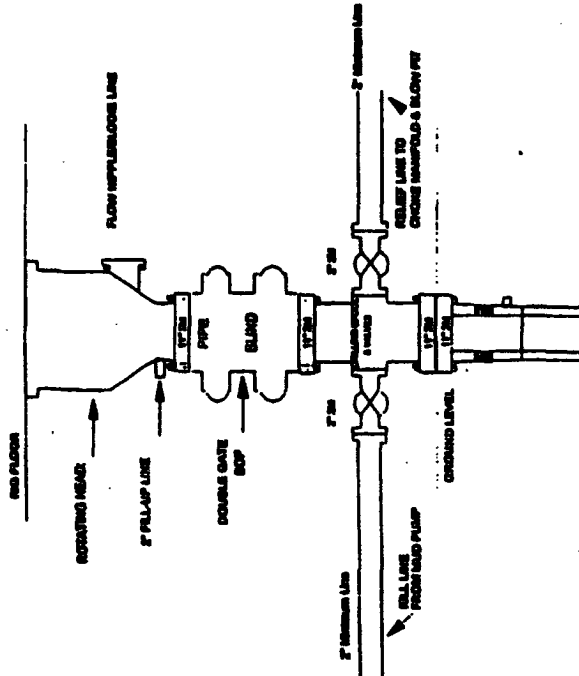


Choke manifold installation from Surface Casing Port to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

Burlington Resources

Drilling Rig
2000 psi System



BOP installation from Surface Casing Port to Total Depth. 1 1/2" Bore 10" Minimum, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi stripping head on top of ram preventers. All BOP equipment is 2,000 psi working pressure.

Figure #1