

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2004 AUG 6 PM 3 08 RECEIVED 070 FARMINGTON, NM	5. Lease Number NMNM-111921 Unit Reporting Number MV-8910010510 DK-891001051B
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company		7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 89499 (505) 326-9700		8. Farm or Lease Name Negro Canyon 9. Well Number #101S
4. Location of Well 2260' FSL, 1095' FWL surface 1873' FNL, 2006' FEL bottom hole		10. Field, Pool, Wildcat Basin Fruitland Coal
Surface-Latitude 36°54.6265'N, Longitude 107°37.9198' W Bottom Hole-Lat. 36°54.7937'N, Longitude 107°37.5211' W		11. Sec., Twn, Rge, Mer. (NMPM) L Sec. 12, T31N, R08W API # 30-045- 32509
14. Distance in Miles from Nearest Town 25 miles to Blanco, NM Post Office	12. County San Juan ✓	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1095'		
16. Acres in Lease	17. Acres Assigned to Well 320 N/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 4843'		
19. Proposed Depth 3879'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6902' GR	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>8/6/04</u>	

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 9-3-04

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".

NMOCD

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

HOLD C104 FOR Directional Survey

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87506

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32509	*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 34287	*Property Name NEGRO CANYON	*Well Number 101S
*OGRD No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	*Elevation 6902'

¹⁰ Surface Location

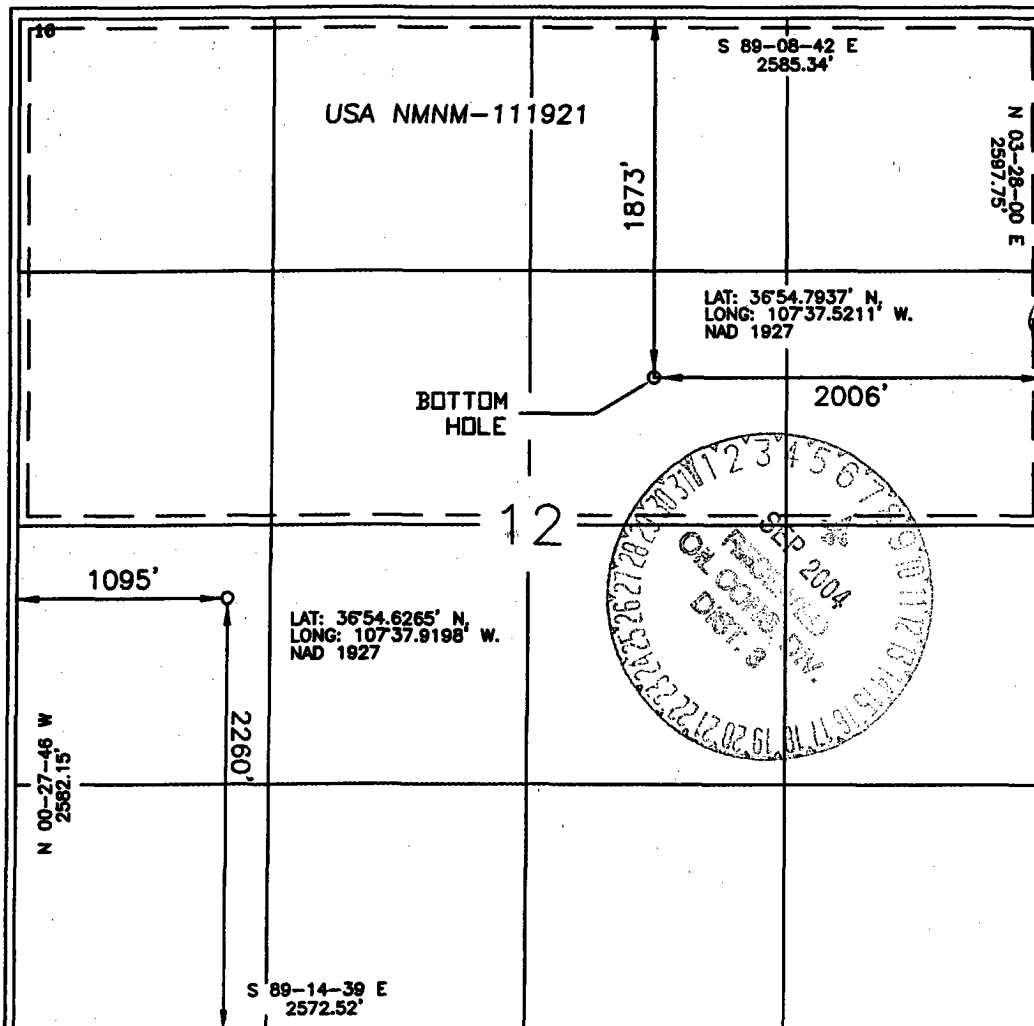
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	12	31-N	8-W		2260'	SOUTH	1095'	WEST	SAN JUAN

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
G	12	31-N	8-W		1873'	NORTH	2006'	EAST	SAN JUAN

¹² Dedicated Acres N/2 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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



¹⁷ OPERATOR CERTIFICATION

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

Signature: *Joni Clark*
Printed Name: Joni Clark
Title: Regulatory Specialist
Date: 8/6/04

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.

Date of Survey: 8/4/04
Signature and Seal of Professional Surveyor: *Galen W. Russell*
Certificate Number: 15703

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 & Gas Lease No.

NMNM-111921

7. Lease Name or Unit Agreement Name

Negro Canyon

8. Well Number

101S

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 & GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter L : 2260 feet from the South line and 1095 feet from the West lineSection 12 Township 31N Range 8W NMPM County San Juan, NM

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

Pit or Below-grade Tank Application

☒ or Closure ☐Pit type New Drill Depth to Groundwater <50' Distance from nearest fresh water well>1000' Distance from nearest surface water>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 ☐PLUG AND ABANDON ☐TEMPORARILY ABANDON ☐CHANGE PLANS ☐PULL OR ALTER CASING ☐MULTIPLE COMPL ☐OTHER: ☐

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.

Burlington Resources proposes to construct a new drill pit. The new drill pit will be a lined pit as detailed in Burlington's general pit plan dated April 26, 2004 on file at the NMOCD office. Burlington Resources anticipates closing the pit according to the general pit permit 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 7/29/2004Type or print name
For State Use Only

Joni Clark

E-mail address:

jclark@br-inc.com

Telephone No.

326-9700

APPROVED BY

TITLE

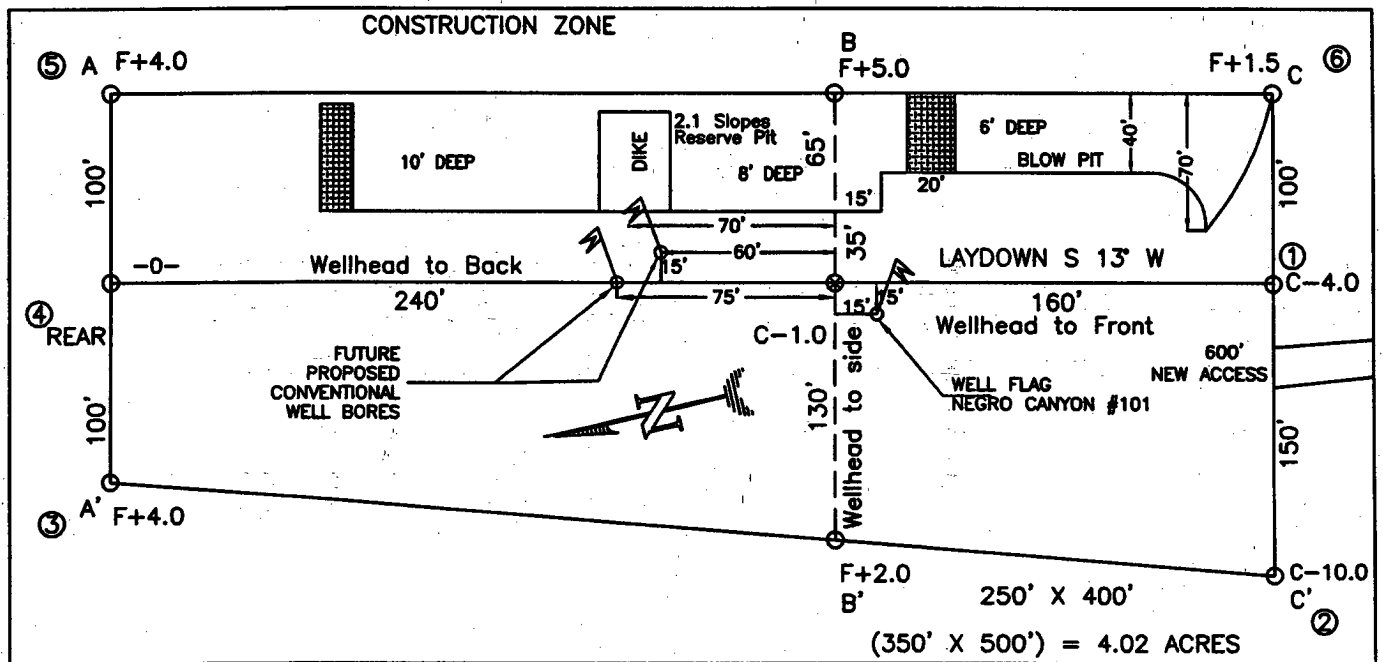
DEPUTY OIL & GAS INSPECTOR, DIST. #2

DATE

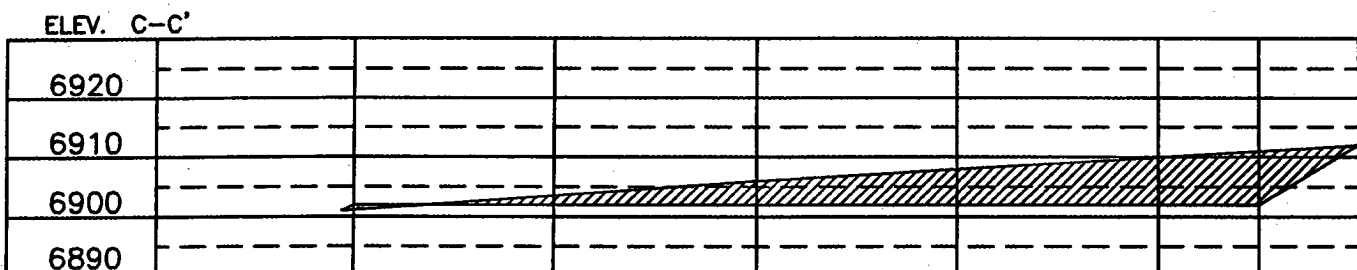
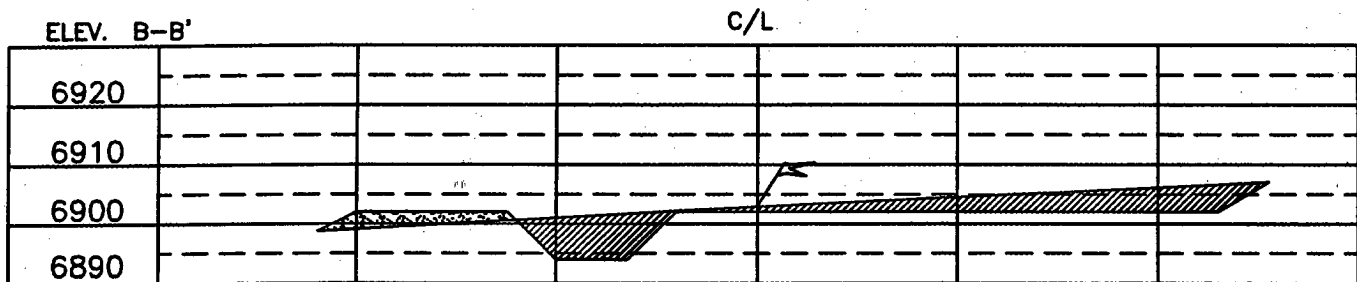
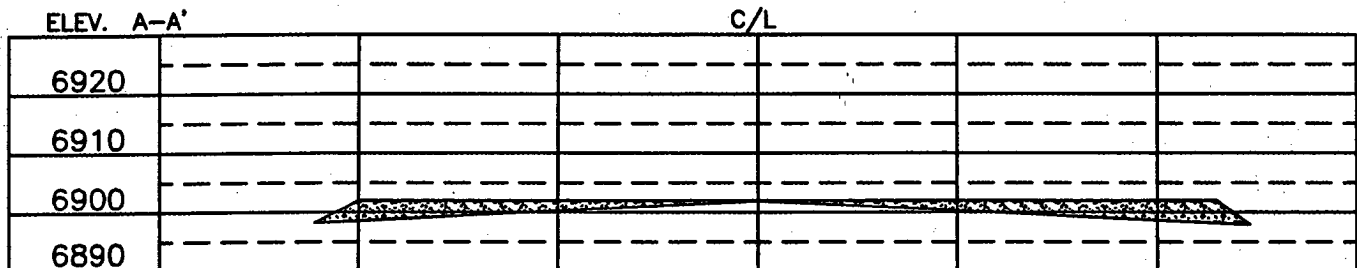
SEP - 7 2004

Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP
NEGRO CANYON #101S, 2260' FSL & 1095' FWL
SECTION 12, T-31-N, R-8-W, NMPM, SAN JUAN COUNTY, NM
GROUND ELEVATION: 6902', DATE: JUNE 24, 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: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
 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: Negro Canyon #101S
Location: Surface - 2260' FSL, 1095' FWL, Section 12, T-31-N, R-8-W
 Bottom Hole - 1873' FNL, 2006' FEL, Section 12, T-31-N, R-8-W
 San Juan County, New Mexico
 Surface -Latitude 36° 54.6265'N, Longitude 107° 37.9198'W
 Bottom Hole - Latitude 36° 37. 'N, Longitude 107° 19. 'W
Formation: Basin Fruitland Coal
Elevation: 6902' GL

<u>Formation Tops:</u>	<u>TVD</u>	<u>TMD</u>	<u>TVD</u> <u>Bottom</u>	<u>Contents</u>
Surface		San Jose	2639'	
Ojo Alamo	2639'	3365'	2730'	aquifer
Kirtland	2730'	3483'	3309'	gas
Fruitland	3309'	4111'	3464'	
Intermediate TD	3414'	4216'		
T/Coal	3464'	4266'	3794'	
B/Coal	3794'	4596'	3795'	
Pictured Cliffs	3795'	4597'		gas
TD	3879'	4681'		

Logging Program:

Mudlog from 7" csg to 3879' (TVD).

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis</u>	<u>Fluid Loss</u>
0-200'	Spud Mud	8.4-9.0	40-50	no control
200'-3414'	LSND	8.4-9.0	30-60	less than 12
3414'-3879'	Air/Mist			

Drilling:

Surface Hole:

Drill to surface casing point of 200' and set 9 5/8" casing.

Intermediate Hole:

Mud drill to kick off point of 250'. At this point the well will be directionally drilled by building 5.0 degrees per 100' with an azimuth of 62 degrees. The end of the build will be at a TVD of 1054', a TMD of 1141', hd of 330' and an angle of 45 degrees. This angle and azimuth will be held to a total depth of 2609' TVD and 3325' TMD. To enter the productive interval vertical, the well will be dropped 5.0 degrees per 100'. The well will be vertical at 7" casing point of 3414' TVD and 4216' TMD.

Production Hole:

Production hole will be drilled vertical from 3414' TVD to 3879' TVD.

Materials:

Casing program: (as listed, the equivalent, or better)

<u>Hole Size</u>	<u>Interval</u>	<u>Size</u>	<u>Weight</u>	<u>Vis.</u>
	<u>TOP</u>	<u>Bottom (TVD)</u>		
12 1/4"	0'	200'	9 5/8"	32.3#
8 3/4"	0'	3414'	7"	23.0#
6 1/4"	3374'	3879'	5 1/2"	15.5#

MB
 200'
 4216'
 4482'

Casing program: (alternate)

Hole Size	Interval		Size	Weight	Vis.
	TOP	Bottom (TVD)			
12 3/4"	0'	200'	9 5/8"	32.3#	H-40
8 3/4"	0'	3414'	7"	23.0#	L-80

Tubing Program:

2 3/8"	0'	3879'	2 3/8"	4.7#	J-55
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Tubing Program: (alternate)

3 1/2"	0'	3879'	3 1/2"	9.2#	J-55
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Float Equipment: 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill float collar. Standard centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2709' (TVD). Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment

9 5/8" x 4 1/2" x 2 3/8" - 11" (2000 psi) wellhead assembly

Cementing:

Conventionally Drilled

Cement with 147 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (188 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. **WOC until cement establishes 250 psi compressive strength prior to NU of BOPE.**

7" intermediate casing - lead w/383 sacks Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack flocele, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks Type III cmt with 1% calcium chloride, 1/4#/sack flocele and 0.2% FL-52 (940 cu.ft., 50% excess to circulate to surface).

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

5 1/2" liner - will not be cemented if run.

BOP and tests:

Surface to intermediate TD - 11" 2000 psi (minimum) double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test BOPE to 600 psi for 30 min.

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) completion BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test BOPE and casing to 1500 psi for 30 minutes.

From surface to 7" TD - a choke manifold will be installed in accordance with Onshore Order No. 2 (Reference Figure #3). When the cavitation completion rig drills the production hole, the completion rig configuration will be used (Reference Figure #4). ~~No choke manifolds will be used on cavitation rig operations.~~

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.

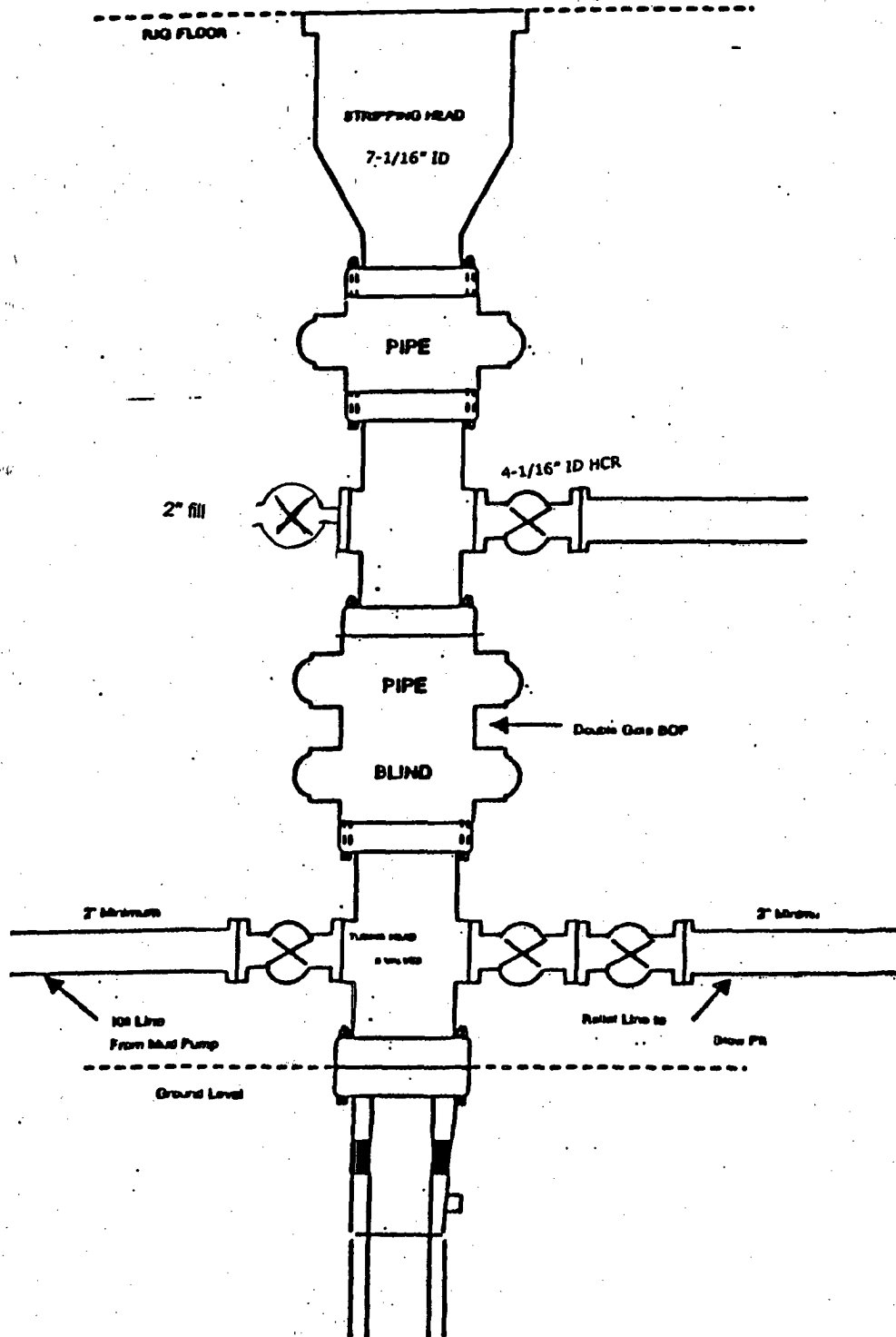
Additional information:

- * The Fruitland Coal formation will be completed.
- * Anticipated pore pressure for the Fruitland is less than 1600 psi.
- * This gas is dedicated.
- * The north half of Section 12 is dedicated to the Fruitland Coal.

James D. McCauley 8-6-04
Drilling Engineer Date

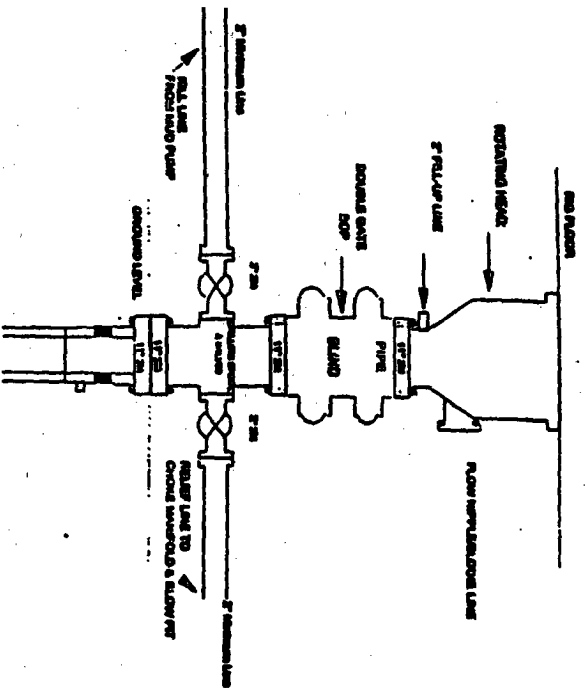
BURLINGTON RESOURCES

Figure #4
Cavitation Rig
BOP Configuration
2,000 psi Minimum System



Burlington Resources

Drilling Rig 2000 psi System



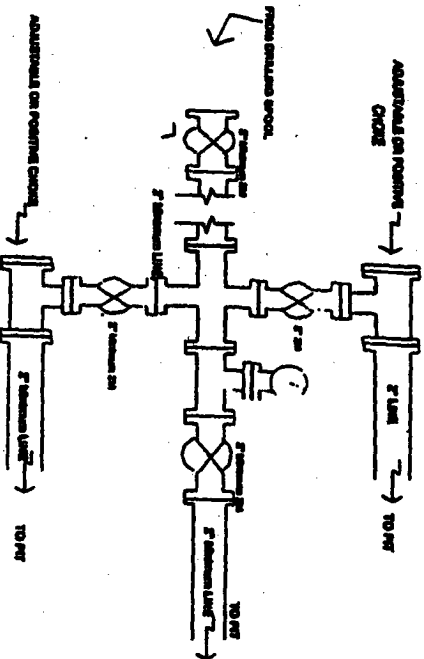
BOP installation from Surface Casing Point to Total Depth, 17\"/>

Figure #1

4-30-01

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 2000 psi System



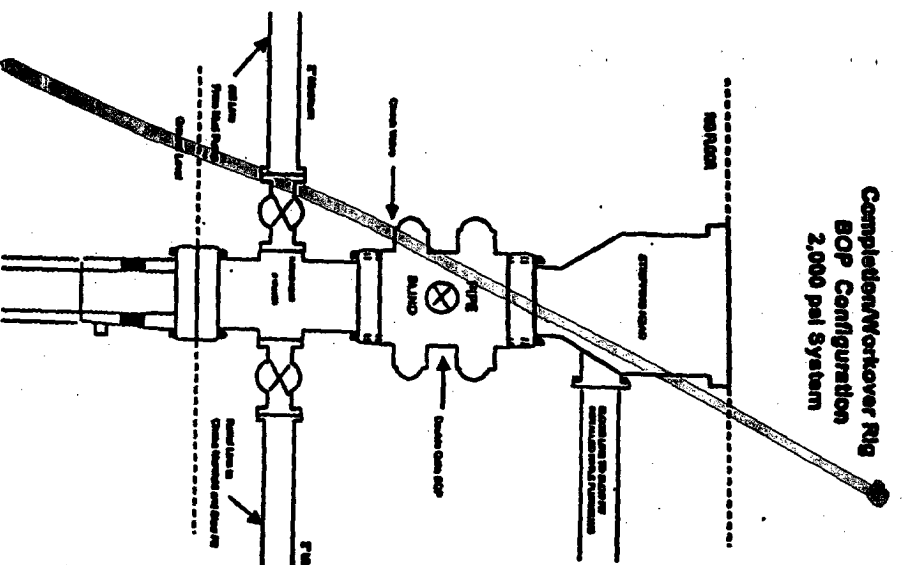
Choke manifold installation from Surface Casing Point to Total Depth, 2,000psi working pressure equipment with two chokes.

Figure #3

4-30-01

BURLINGTON RESOURCES

Completion/Workover Rig BOP Configuration 2,000 psi System



Minimum BOP installation for all Completion/Workover Operations, 7-1/16\"/>

Figure #2