

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2005 JUL 7 2 4 03
RECEIVED
OTO FARMINGTON NM

1a. Type of Work DRILL	5. Lease Number NMNM-12013 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company LP	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name EPNG A 9. Well Number #100S
4. Location of Well 840' FSL, 2210' FEL Latitude 36° 57.6438'N, Longitude 107° 27.7118'W	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Unit O, Sec. 21, T32N, R06W API # 30-045- 33222
14. Distance in Miles from Nearest Town 22.6 Miles	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 840'	
16. Acres in Lease	17. Acres Assigned to Well 320 E/2 FC
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 53'	
19. Proposed Depth 3205'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6419' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Philomena Thompson</u> Regulatory Associate II	6/8/2005 Date

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY Stacy Townsend TITLE Acting AFM DATE 7/21/05

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.
NOT AN HPA FC WELL

NMOC

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- 33 222	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 6976	⁶ Property Name EPNG A	⁵ Well Number 100S
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 6419'

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
0	21	32-N	6-W		840	SOUTH	2210	EAST	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
¹² Dedicated Acres 320 E2 FC					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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	
17	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Amanda Sandoval Printed Name Regulatory Assistant II Title 5-23-05 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 knowledge and belief. APRIL 2005 Date of Survey Signature and Seal of Professional Surveyor 14531 Certificate Number

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

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 O : 840 feet from the South line and 2210 feet from the East line
 Section 21 Township 32N Range 6W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
 6419' GR

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: New Drill Pit ☒

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, 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 ☐.

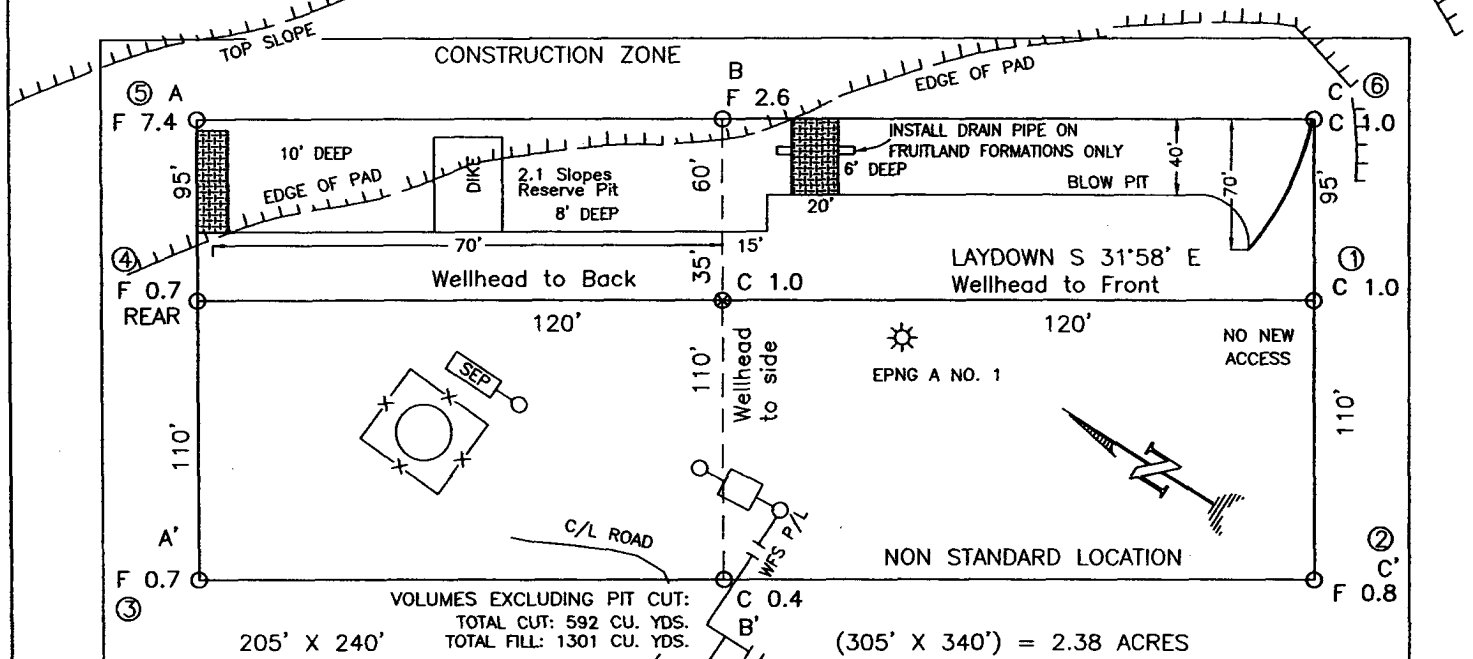
SIGNATURE Philana Thompson TITLE Regulatory Associate II DATE 6/8/2005

Type or print name Philana Thompson E-mail address: PThompson@br-inc.com Telephone No. 505-326-9530
For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 83 DATE AUG 12 2005

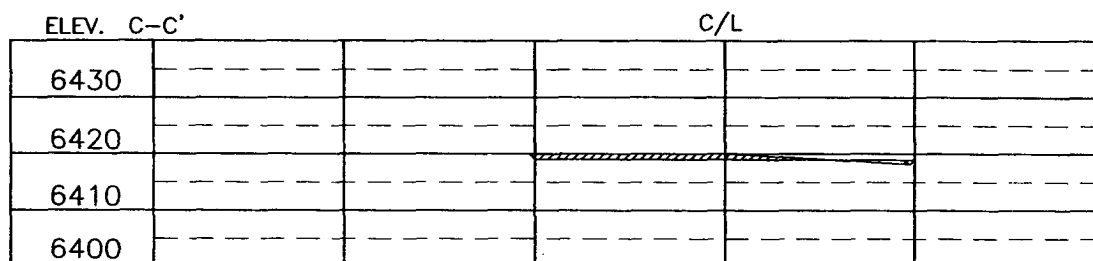
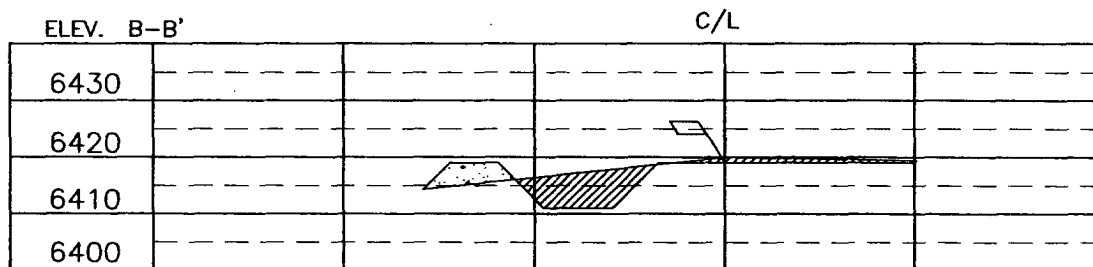
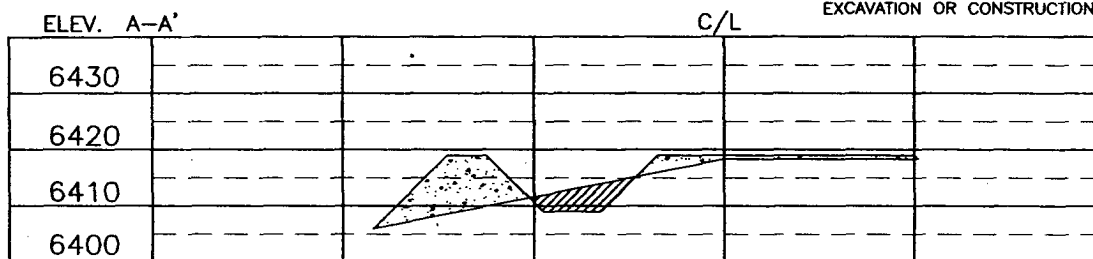
Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP
EPNG A NO. 100S, 840 FSL 2210 FEL
SECTION 21, T-32-N, R-6-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6419, DATE: APRIL 7, 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) 326-8019
 NEW MEXICO L.S. No. 14831
 DRAWN BY: G.V. CADFILE: BR570_GFB
 DATE: 4/25/05

NO. BR570

OPERATIONS PLAN

Well Name: EPNG A #100S
Location: Unit O (SWSE), 840' FSL & 2210' FEL, Section 21, T32N, R6W
 San Juan County, New Mexico
 Latitude 36° 57.6438'N; Longitude 107° 27.7118'W
Formation: Basin Fruitland Coal
Elevation: 6419' GR

Formation:	Top	Bottom	Contents
Surface	San Jose		
Ojo Alamo	2296'	2408'	
Kirtland	2408'	3022'	gas
Intermediate TD	2992'		
T/Fruitland	3022'		gas
B/Fruitland	3120'		gas
T/Pictured Cliffs	3126'		gas
Total Depth	3205'		

Burlington Resources wishes to utilize a sump on this well.

Logging Program:

Mudlog from intermediate to TD
 Cores - none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
120'- 2992'	LSND/Clear Water	8.4-9.0	30-60	no control
2992' - 3205'	Starch-Polymer/Air/Mist			

Circulating media will be contractor dependent

Alternate Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
120' - 2992'	LSND/Clear Water	8.4-9.0	30-60	no control
2992' - 3205'	Air/Mist			

Circulating media will be contractor dependent.

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

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

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
12 1/4"	0' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 2992'	7"	20.0#/23#	J-55/N-80
6 1/4"	2972' - 3205'	5 1/2"	15.5#	J-55/N-80

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). ~~Choke manifolds will be used on cavitation rig.~~

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 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.

Wellhead Equipment: 9 5/8" x 7" x 2 3/8" x 11" 2000 psi xmas tree assembly.

Cementing:9 5/8" surface casing Pre-Set Drilled -

Cement with 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 -70 sx (113 cf of slurry @ 1.28 yield) 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. 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 - Cement with 260 sx (554 cu ft of slurry @ 2.13 yield) Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack celloflake, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks (124 cu ft of slurry @ 1.38 yield) Type III cmt with 1% calcium chloride, 1/4#/sack Celloflake and 0.2% FL-52. Total of 678 cf - 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 2408'. Two turbolating centralizers at the base of the Ojo Alamo @ 2408'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

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

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.

Additional information:

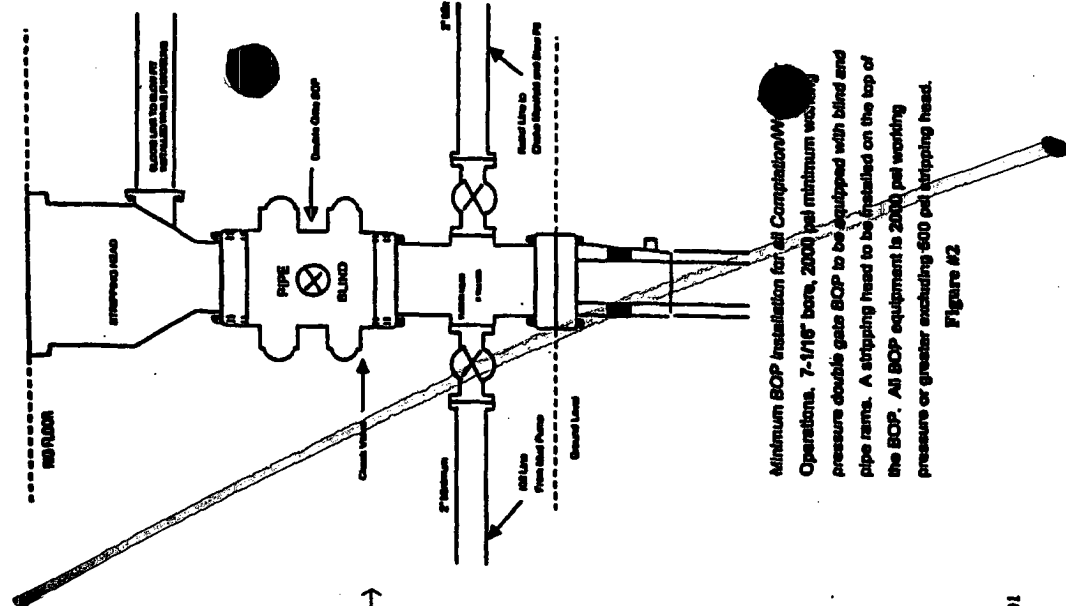
- The Fruitland Coal formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressure for the Fruitland is less than 500 psi.
- This gas is dedicated.
- The E/2 of the section is dedicated to this well.
- This is not an HPA well.


Drilling Engineer

6/15/05
Date

BURLINGTON RESOURCES

Completion/Workover Rig
BOP Configuration
2,000 psi System



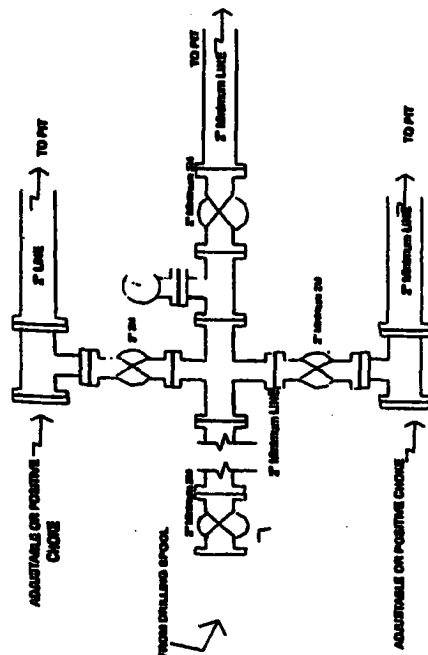
Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi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

Figure #2

4-20-01

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System



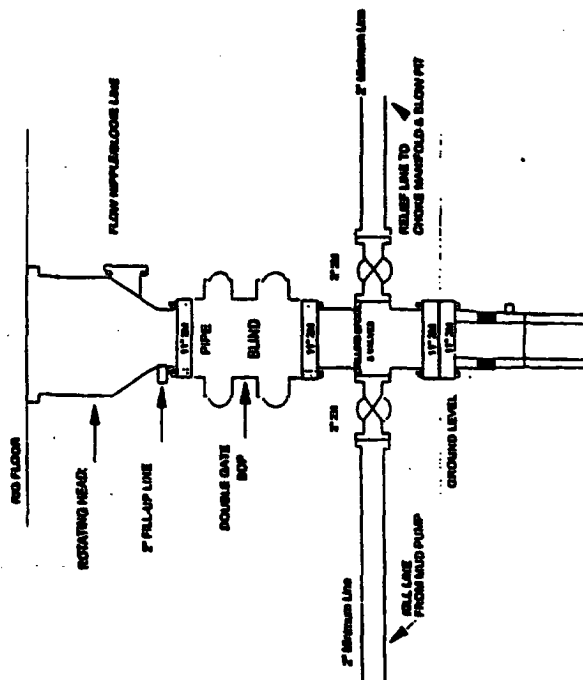
Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

Burlington Resources

Drilling Rig
2000 psi System



BOP Installation from Surface Casing Point to Total Depth. 11" Bore 10" Nozzle, 2000 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 2,000 psi working pressure.

Figure #1

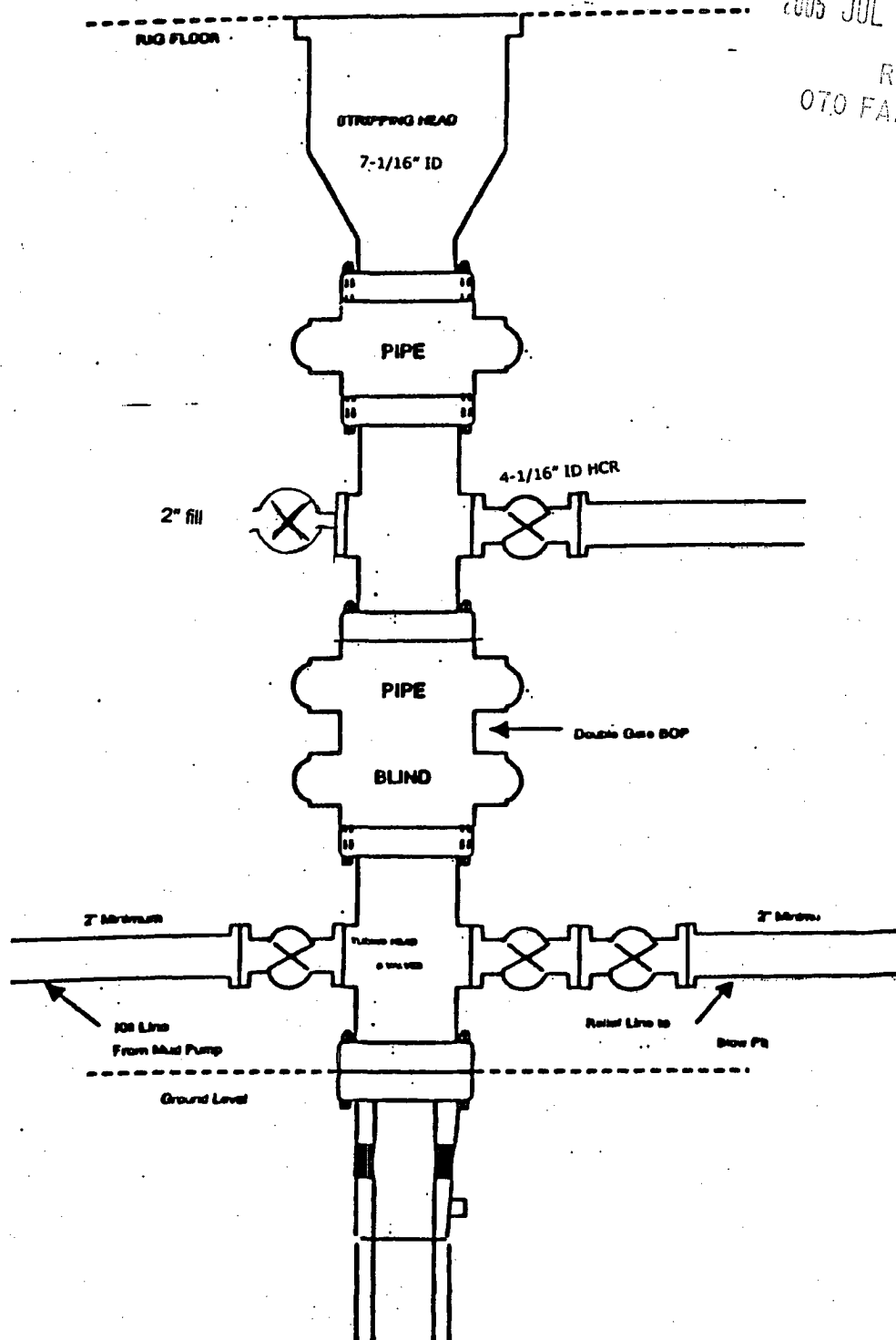
BURLINGTON RESOURCES

Figure #4

Cavitation Rig

BOP Configuration

2,000 psi Minimum System



2005 JUL 13 PM 1 50

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OTO FARMINGTON ILL