

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 JUL 17 09:54 47

1a. Type of Work DRILL	5. Lease Number NM-017727A Unit Reporting Number	
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 87499 (505) 326-9700	8. Farm or Lease Name Neudecker 9. Well Number #7F	
4. Location of Well 865' FNL, 1150' FWL Latitude 36° 43.8027'N, Longitude 107° 50.4548'W <i>Lot 4</i>	10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) D Sec. 13, T29N, R10W API # 30-039- <i>045-33847</i>	
14. Distance in Miles from Nearest Town 1.1 miles to Blanco, NM Post Office	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 865'	17. Acres Assigned to Well W/2 200 acres <i>319.8</i>	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drlg. Compl. or Applied for on this Lease 52'	
19. Proposed Depth 6703'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 5753' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <i>Joni Clark</i> Regulatory Analyst	<i>7/14/06</i> Date	

PERMIT NO.

APPROVAL DATE

APPROVED BY *D. Montano*

TITLE *AEH*

DATE *7/27/06*

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

NMOCDC

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-10

Revised October 12, 2006

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

OIL CONSERVATION DIVISION

Submit to Appropriate District Office

DISTRICT III
4000 Rio Brazos Rd., Aztec, N.M. 87410

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

State Lease - 4 Copies

Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-33847	² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 7355	⁵ Property Name NEUDECKER	⁶ Well Number 7F
⁷ OCRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 5753

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
D	13	29-N	10-W	4	865	NORTH	1150	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
D									

¹² Dedicated Acres DK 320.00ac W2 319.8	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

16

FD 3 1/4" BC 1967 BLM LOT 4 39.82	S 89°18'53" W 2633.75' (M) LOT 3 39.48 LAT: 36.73005° N. (NAD 83) LONG: 107.84153° W. (NAD 83) LAT: 36°43.8027' N. (NAD 27) LONG: 107°50.4548' W. (NAD 27)	FD 3 1/4" BC 1967 BLM LOT 2 39.37	LOT 1 39.02
N 01°01'57" W 2633.76' (M) LOT 5 39.97 USA SF-079509	USA NM-01772-A LOT 6 39.63	LOT 7 40.00	LOT 8 39.65
FD 2 1/2" BC 1963 BLM LOT 11 40.46	LOT 10 39.83	LOT 9 35.50	
LOT 12 40.62	LOT 13 39.99		

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Amanda Sanchez 6-20-06
Signature Date
Amanda Sanchez
Printed Name

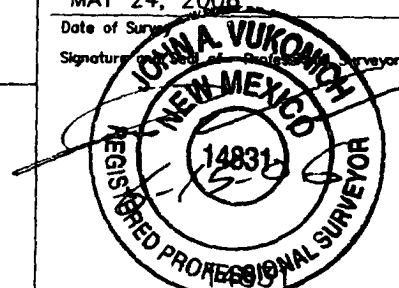
18 SURVEYOR CERTIFICATION

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.

MAY 24, 2006

Date of Survey

Signature of Registered Professional Surveyor



Certificate Number

8

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

May 27, 2004

OIL CONSERVATION DIVISION1220 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 D : 865 feet from the North line and 1150 feet from the West line
Section 13 Township 29N Rng 10W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5753'

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type New Drill Depth to Groundwater <100 Distance from nearest fresh water well >1000 Distance from nearest surface water 1200'

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 ☒

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 drill pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drill 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. Burlington Resources anticipates closing the pit according to the Drilling / Workover Pit Closure Procedure dated August 2, 2004 on file at the NMOCD office.

On this new drill, a vent/flare pit may be the only pit that will be required. Under this circumstance, a portion of this vent/flare pit will be designed to manage fluids, and that portion will be lined, as per the risk ranking criteria.

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 Analyst DATE 7/14/2006

Type or print name Joni Clark E-mail address: jclark@br-inc.com Telephone No. 505-326-9700
For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 09 DATE JUL 31 2006
Conditions of Approval (if any):

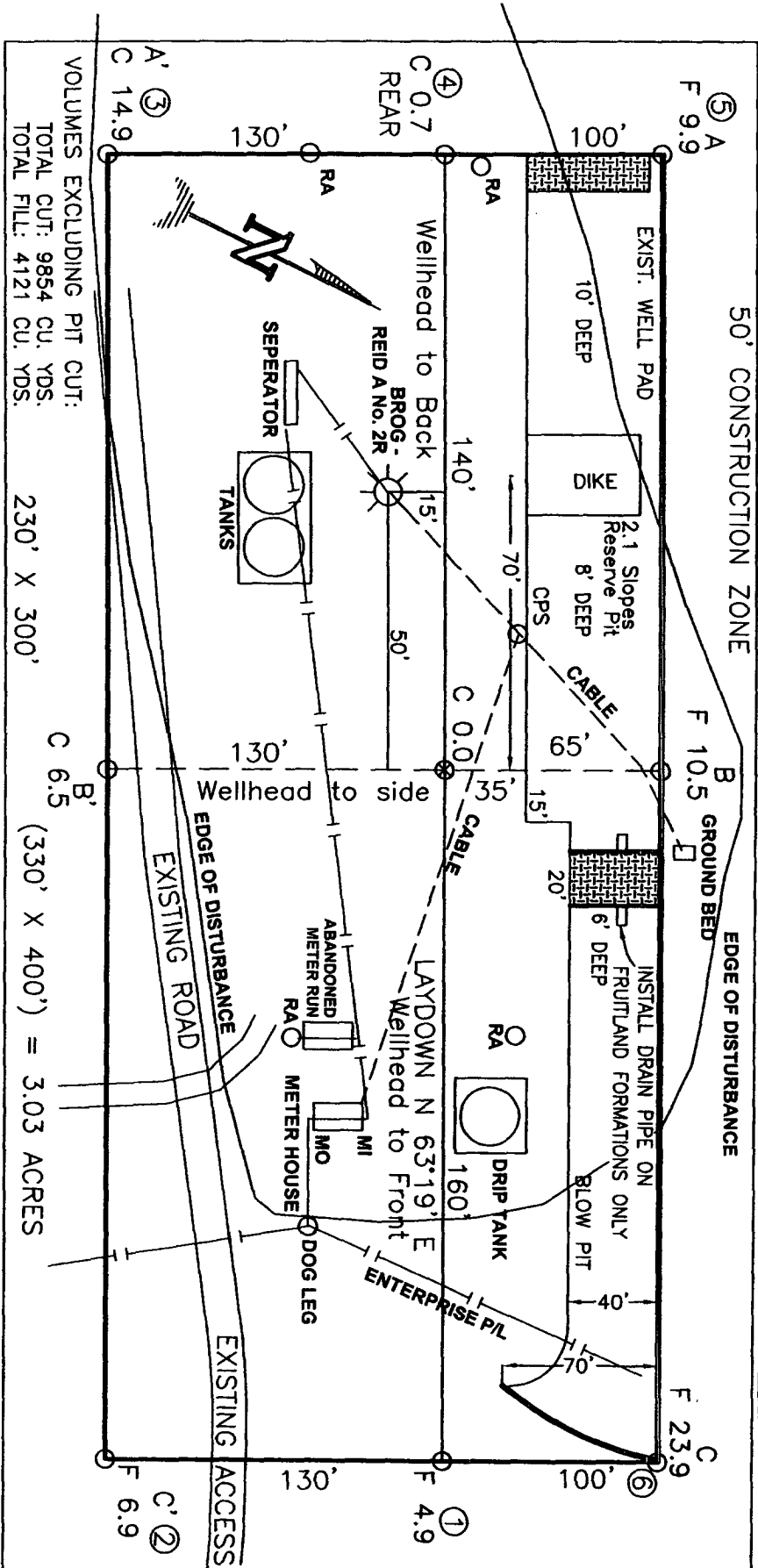
BURLINGTON RESOURCES OIL & GAS COMPANY LP

NEUDECKER NO. 7F, 865 FNL 1150 FWL

SECTION 13, T-29-N, R-10-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 5753, DATE: MAY 24, 2006


NAD 83
LAT. = 36.73005° N
LONG. = 107.84153° W
NAD 27
LAT. = 36.43.8027° N
LONG. = 107.50.4548° W



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: ESTIMATED VOLUMES CALCULATED BY AVERAGE END AREA AT CROSS-SECTION SHOWN

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	DATE
 <p>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 U.S. 14831</p>			
DRAWN BY: A.G.		CHECKED BY: B.R.	
SCALE: BRG/50' x 10'		DATE: 06/10/06	

BURLINGTON RESOURCES OIL & GAS COMPANY LP

NEUDECKER No. 7F, 865 FNL 1150 FWL

SECTION 13, T-29-N, R-10-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO

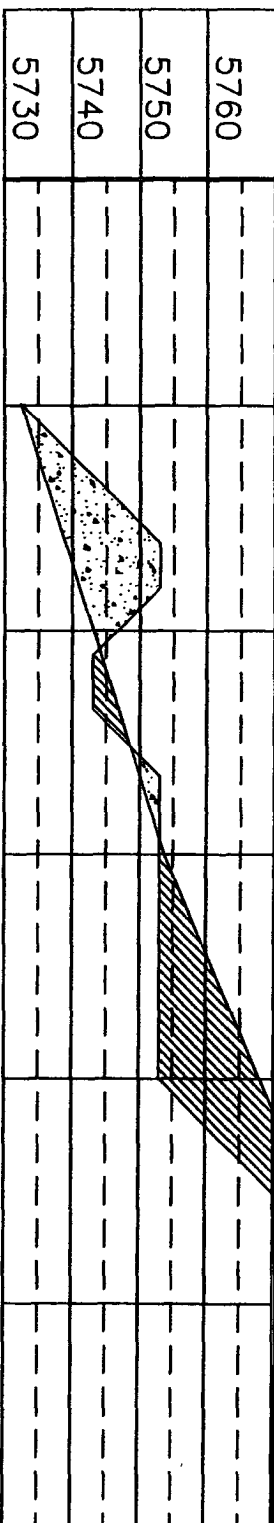
GROUND ELEVATION: 5753, DATE: MAY 24, 2006

NAD 83
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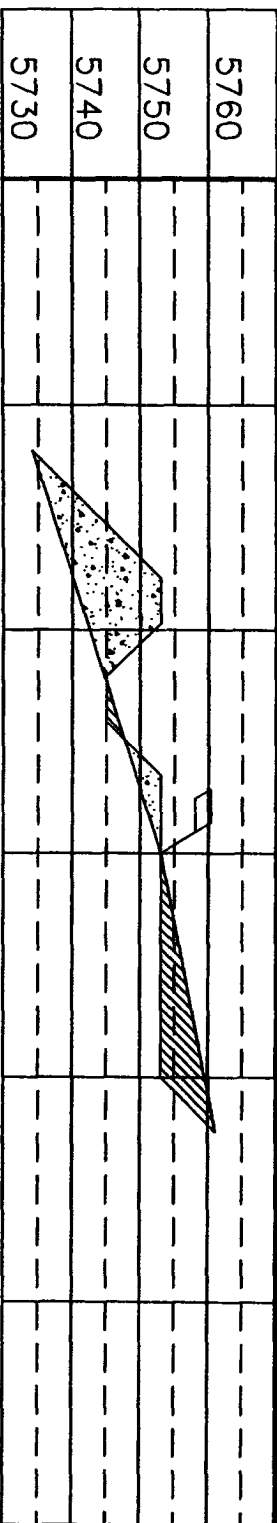
ELEV. A-A'

C/L



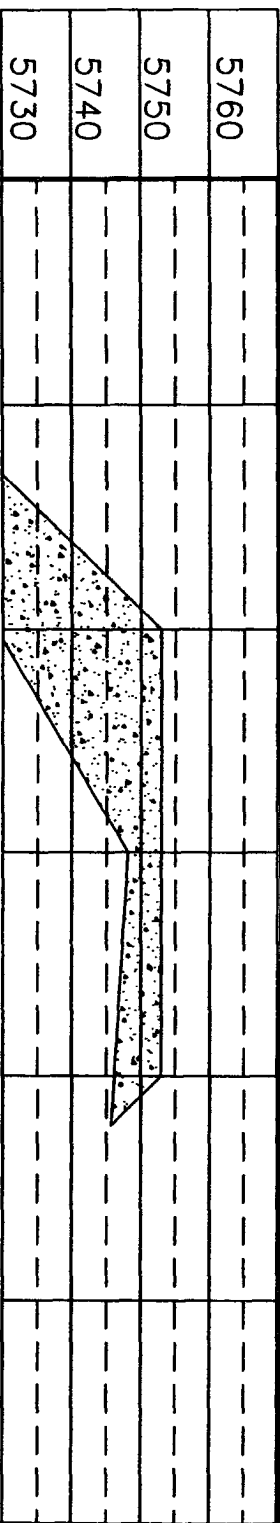
ELEV. B-B'

C/L




ELEV. C-C'

C/L



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:	REMOVED BY:
 <p>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 U.S. 14831</p>		
DRAWN BY: A.G.	CHECKED BY: BRS/SCB	DATE: 06/10/08
ROW# BR635		

OPERATIONS PLAN

Well Name: NEUDECKER 7F
Location: 865' FNL & 1150' FWL, Section 13 T29N R10W
San Juan County, New Mexico

Formation: Basin Dakota
Elevation: 5753' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1039'	
Ojo Alamo	1039'	1112'	aquifer
Kirtland	1112'	1942'	gas
Fruitland Coal	1942'	2152'	gas
Pictured Cliffs	2152'	2324'	gas
Lewis	2324'	2792'	
Huerfanito Bentonite	2792'		
Chacra	3172'	3822'	gas
Massive Cliff House	3822'	3846'	gas
Menefee	3846'	4479'	gas
Massive Point Lookout	4479'	4835'	gas
Mancos Shale	4835'	5660'	
Upper Gallup	5660'	6409'	gas
Greenhorn	6409'	6469'	gas
Graneros	6469'	6530'	gas
Two Wells	6530'	6599'	gas
Paguate	6599'	6653'	gas
Cubero	6653'	6703'	gas
Encinal	6703'	6703'	gas
Total Depth:	6703'		gas

Logging Program:

Mud Logs/Coring/DST

Mud logs - none
Coring - none
DST - none
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 - 120'	Spud MUD/Air/Air Mist	8.4 - 9.0	40 - 50	no control
120' - 2424'	LSND	8.4 - 9.0	30 - 60	no control
2424' - 6703'	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' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 2424'	7"	20#	J-55
6 1/4"	0' - 6703'	4 1/2"	10.5#	J-55

Tubing Program:

<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
0' - 6703'	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, BOPE and casing will be tested to 600 psi for 30 minutes.

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, BOPE and casing will be tested to 1500 psi for 30 minutes.

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 195 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/24 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss. Tail w/90 sxs Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: 176 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (540 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 @ 1112'. Two turbolating centralizers at the base of the Ojo Alamo @ 1112'. 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 279 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 (553 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:

- This will be a Dakota only.
- 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 East half of Section 25 is dedicated to the Dakota formation.
- This gas is dedicated.



Drilling Engineer

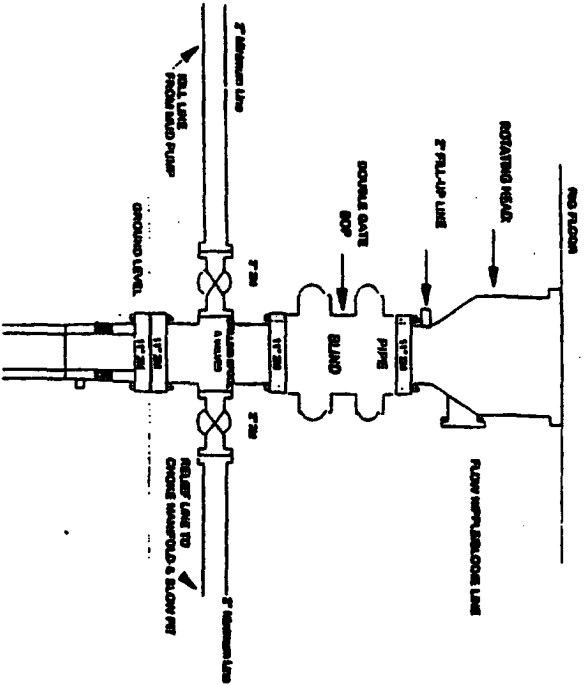
7/13/06

Date

Blowout preventor equipment (BOPE) tests must be performed using an appropriately sized test plug. The BOPE test must be performed and recorded using a test pump, calibrated test gauges and a properly calibrated strip or chart recorder. The test must be recorded in the driller's log and will include a low pressure test requirement of 250 psig held for five minutes and a high pressure test requirement held for ten minutes as described in Onshore Order No. 2 or otherwise authorized in the Application for Permit to Drill (APD). A successful BOPE test using a test plug is considered when no pressure drop occurs over the duration of the test. Test gauges and recorders must be of the proper range and resolution commensurate with the authorized test pressure. Where intermediate casing strings are used, only one BOPE test will be necessary contingent upon the test being conducted to the highest approved test pressure to which the BOPE will be exposed. Casing pressure tests must be held for 30 minutes with no more than a 10 percent pressure drop during the duration of the test.

Burlington Resources

Drilling Rig 2000 psi System



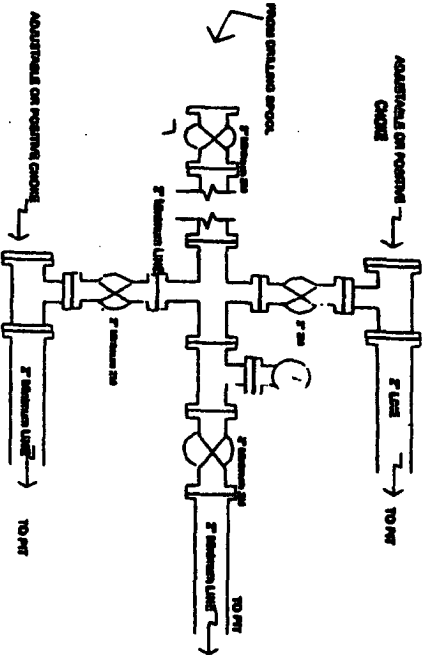
BCP insulation from Surface Casing Point to Total Depth. 11" Bore 10" Internal. 2000 psi working pressure double gate BCP to be equipped with blind rams and pipe rams. A 500 psi rating based on top of ram preventer. All BCP equipment is 2,000 psi working pressure

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 2000 psi System



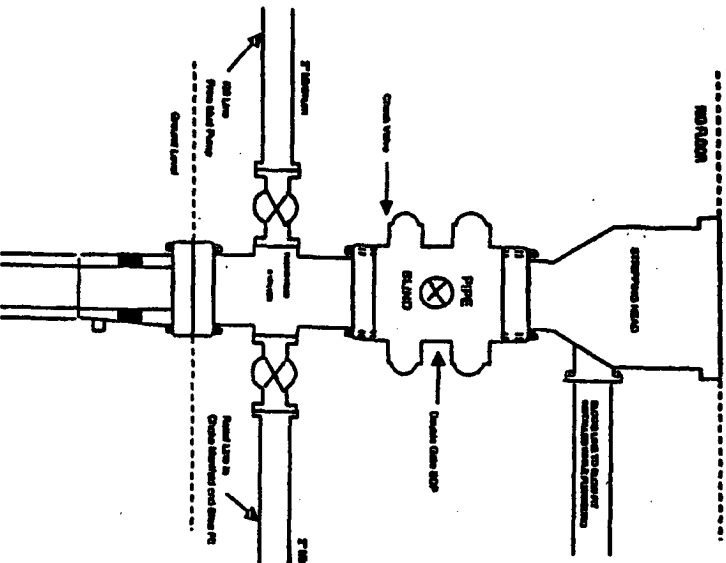
Choke installed insulation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

BURLINGTON RESOURCES

Completion/Workover Rig BCP Configuration 2000 psi System



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

Figure #2

4-20-01