

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL

1b. Type of Well
GAS

2. Operator
BURLINGTON
RESOURCES Oil & Gas Company

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499
(505) 326-9700

4. Location of Well
Unit F (SENW), 1620' FNL, 1500' FWL
Latitude 36° 50.6161'N
Longitude 107° 56.7349'W

5. Lease Number
NMSF-078198
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name
Sunray C

9. Well Number
#1008

10. Field, Pool, Wildcat
Basin Fruitland Coal/ Aztec
Pictured Cliffs/ ~~Wildcat~~ Fruitland Sands, North
Aztec

11. Sec., Twn, Rge, Mer. (NMPM)
Sec. 1, T30N, R11W
API # 30-045-3 3774

12. County
San Juan

13. State
NM

14. Distance in Miles from Nearest Town
5 miles to Aztec, NM

15. Distance from Proposed Location to Nearest Property or Lease Line
1500'

16. Acres in Lease

17. Acres Assigned to Well
N2 322.340 FC/ NW4 160.850 FS/PC

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
910' - Sunray C #1A

19. Proposed Depth
2730'

20. Rotary or Cable Tool
Rotary

21. Elevations (DF, FT, GR, Etc.)
5952' GL

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Amanda Sanchez
Regulatory Analyst

Date 6-1-06

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY [Signature] TITLE APU DATE 7/5/06

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.

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-10:
Revised October 12, 200
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT **Aztec**

*API Number 30-G45-33774	*Pool Code 71629/71280/71240	*Pool Name Basin Fruitland Coal/ Aztec Pictured Cliffs
*Property Code 7565	*Property Name SUNRAY C	*Well Number 100S
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	*Elevation 5952'

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
F	1	30-N	11-W	6	1620	NORTH	1500	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
*Dedicated Acres N2 322.340 FC NW4 160.850 FS/PC					*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

FD 3 1/4" BLM BC. 1953	N 89-39-05 W	5361.47' (M)	FD 3 1/4" BLM BC. 1953
2628.02' (M)	LOT 4 40.39	LOT 3 40.38	LOT 2 40.44
			LOT 1 40.43
		LAT. 36.84361° N. (NAD 83) LONG. 107.94620° W. (NAD 83)	
		LAT. 36°50.6161' N. (NAD 27) LONG. 107°56.7349' W. (NAD 27)	
1500'			
LOT 5 40.02	LOT 6 40.06	LOT 7 40.29	LOT 8 40.33
USA SF-078198		NYE, C. H. ET UX USA NM-03758	
FD 3 1/4" BLM BC. 1969			
LOT 12 40.36	LOT 11 40.28	LOT 10 40.40	LOT 9 40.32
LOT 13 40.42	LOT 14 40.34	LOT 15 40.33	LOT 16 40.25

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 Sandoval 3-21-06
Signature Date

Amanda Sandoval

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.

Date of Survey 2006
Signature and Seal of Professional Surveyor
4831
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

WELL API NO.

30-045- 33774

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

NMSF-078198

7. Lease Name or Unit Agreement Name

Sunray C

8. Well Number

#100S

9. OGRID Number

14538

10. Pool name or Wildcat

Basin FC/ Aztec PC/WC FS

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 F : 1620 feet from the North line and 1500 feet from the West line
 Section 1 Township 30N Range 11W NMPM County San Juan

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

5952'

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

>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 ☐TEMPORARILY ABANDON ☐PULL OR ALTER CASING ☐PLUG AND ABANDON ☐CHANGE PLANS ☐MULTIPLE COMPL ☐**SUBSEQUENT REPORT OF:**REMEDIAL WORK ☐COMMENCE DRILLING OPNS. ☐CASING/CEMENT JOB ☐ALTERING CASING ☐P AND A ☐

OTHER:

New Drill ☒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

TITLE

Regulatory Analyst

DATE

5/15/2006

Type or print name

Amanda Sanchez

E-mail address:

asandoval@br-inc.com

Telephone No.

505-326-9891

For State Use Only

APPROVED BY

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 23

DATE

JUL 07 2006

Conditions of Approval (if any):

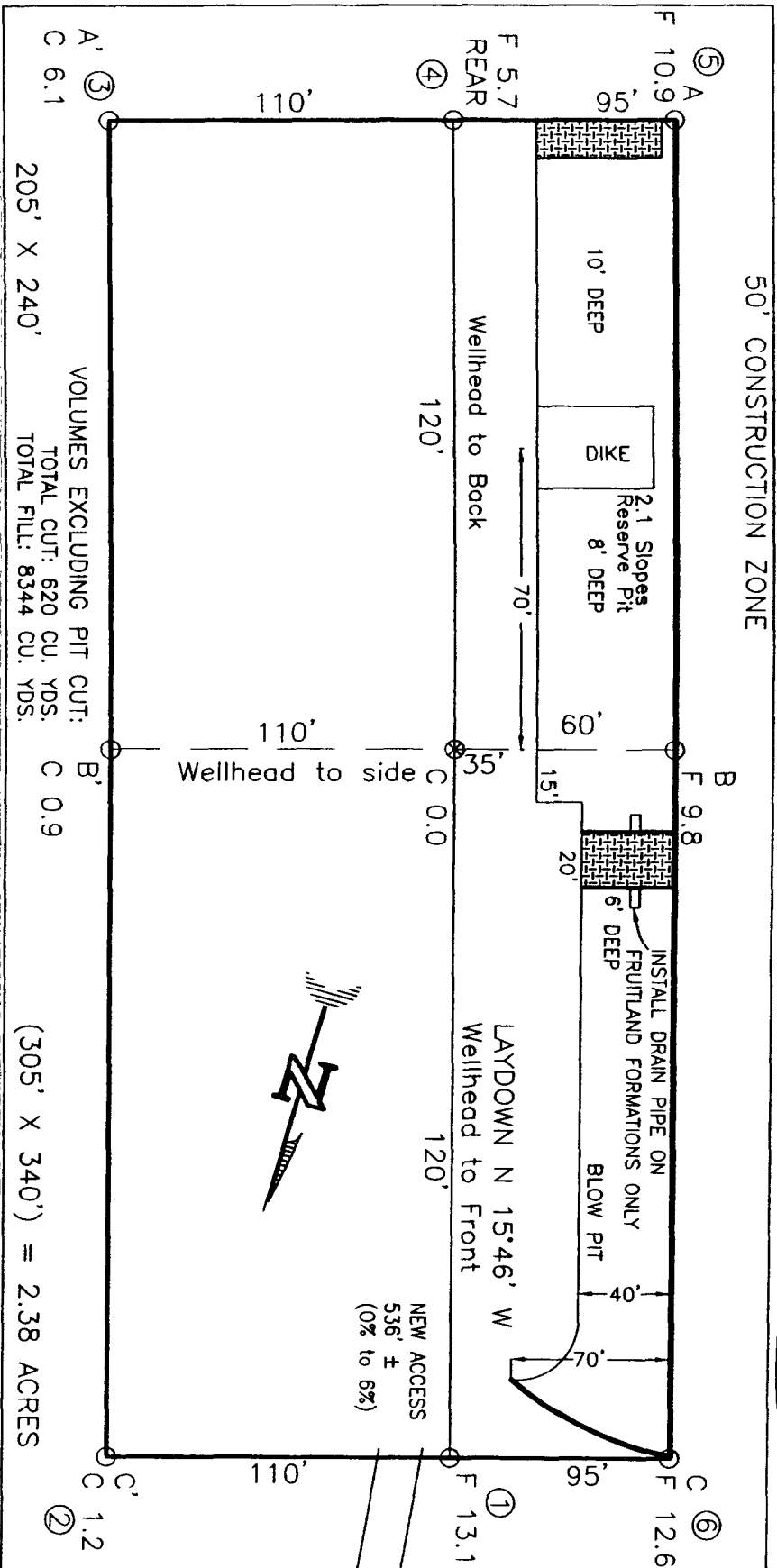
BURLINGTON RESOURCES OIL & GAS COMPANY LP

SUNRAY C No. 100S, 1620 FNL 1500 FWL

SECTION 1, T-30-N, R-11-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 5952', DATE: MARCH 7, 2006

NAD 83
LAT. = 36.84361° N
LONG. = 107.94620° W
NAD 27
LAT. = 36.50.6161 N
LONG. = 107.56.7349 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
Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 13008 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO L.S. 14831			
DRAWN BY: A.G.	DATE: 03/16/06	CHECKED BY: B.R.G.	DATE: 03/16/06

BURLINGTON RESOURCES OIL & GAS COMPANY LP

SUNRAY C No. 100S, 1620 FNL 1500 FWL

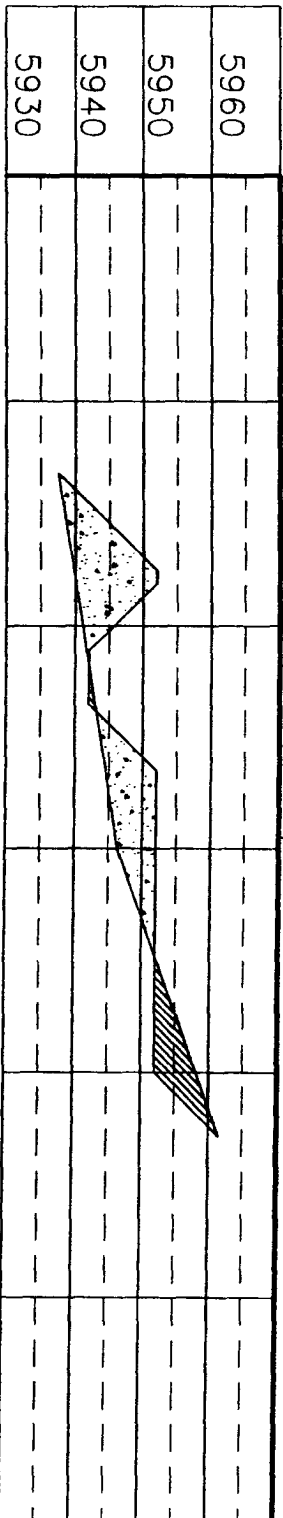
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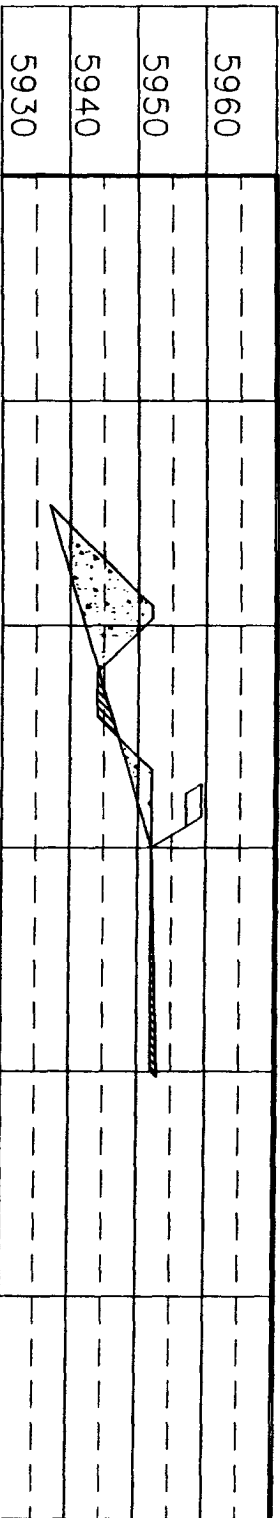
ELEV. A-A'

C/L



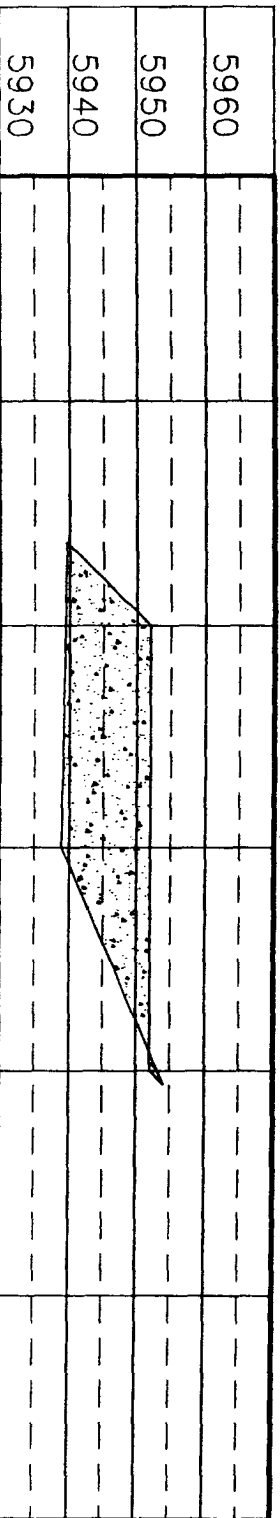
ELEV. B-B'

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.



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 U.S. 14831

DRAWN BY: A.G.
REVISED BY: A.G.

DATE: 03/18/06

OPERATIONS PLAN

Well Name: Sunray C #100S
 Location: Unit F (SENW) 1620' FNL & 1500' FWL, Section 1, T30N, R11W
 San Juan County, New Mexico
 Latitude 36o 50.6161'N Longitude 107o 56.7349' W
 Formation: Basin Fruitland Coal
 Elevation: 5952' GR

Formation:	Top	Bottom	Contents
Ojo Alamo	1170'	1217'	aquifer
Kirtland	1217'	2174'	gas
T/Fruitland	2174'	2530'	gas
Pictured Cliffs	2530'		
Total Depth	2730'		

Logging Program: None

Mud Program:	Interval	Type	Weight	Vis.	Fluid Loss
	0- 120'	Spud/Air/Air Mist	8.4-8.9	40-50	no control
	120-2730'	Non-dispersed	8.4-9.5	30-60	no control

Casing Program:	Hole Size	Depth Interval	Csg.Size	Wt.
	Grade			
	8 3/4 "	0 - 120'	7"	20.0#
	J-55			
	6 3/4 "	0 - 2730'	4 1/2"	10.5#
	J/K-55			

Tubing Program:	Depth Interval	Csg.Size	Wt.
J-55	0 - 2730'	2 3/8"	4.7#

Float Equipment: 7" surface casing - guide shoe. Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - float shoe and float collar on bottom.
 Centralizers run every third joint above shoe to the base of the Ojo Alamo @ 1217'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1217'. 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" x 11" 2000 psi xmas tree assembly.

Cementing:

7" surface casing Pre-Set Drilled - Cement with Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.28 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 - Cement with 42 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (54 cu ft of slurry @ 1.28 yield). 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.

4 1/2" production casing - Cement with 139 sx (296 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 420 cf - 50% excess to circulate to surface.

BOP and tests:

Surface to TD - 11" 2000 psi (minimum double gate BOP stack, (Reference Figure #1 and #2). Prior to drilling out surface casing, test rams to 600 psi/30 min.

Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 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:

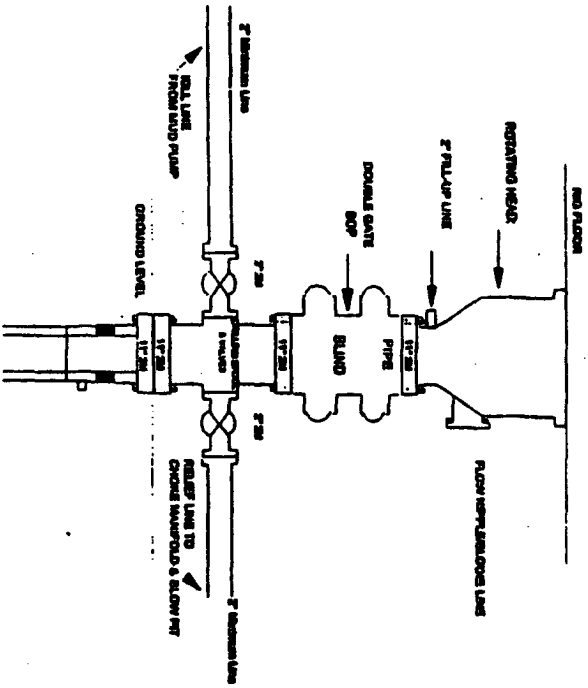
- * The Fruitland Coal, Pictured Cliffs, and Fruitland Sands formation will be completed.
- * Anticipated pore pressure for the Fruitland Coal is 600 - 700 psi.
- * This gas is dedicated.
- * The north half of section 1 is dedicated to the FC and the northwest Quarter of section 1 is dedicated to the Fruitland Sands and Pictured Cliffs.
- * New casing will be utilized.
- * Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

Adam M. [Signature]
Drilling Engineer

5/15/2006
Date

Burlington Resources

Drilling Rig 2000 psi System



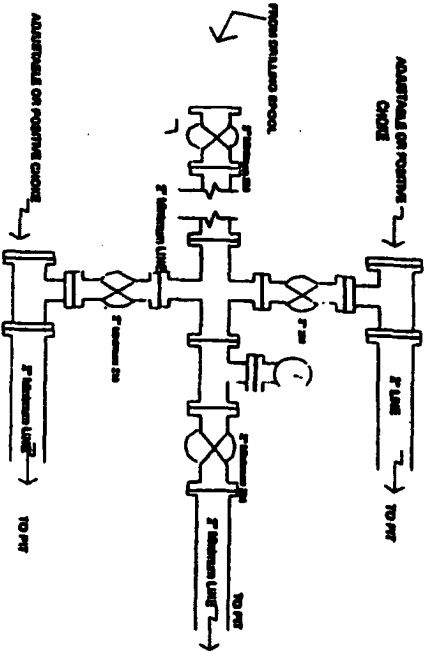
BCP installation from Surface Casing Head to Total Depth, 17\"/>

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 2000 psi System



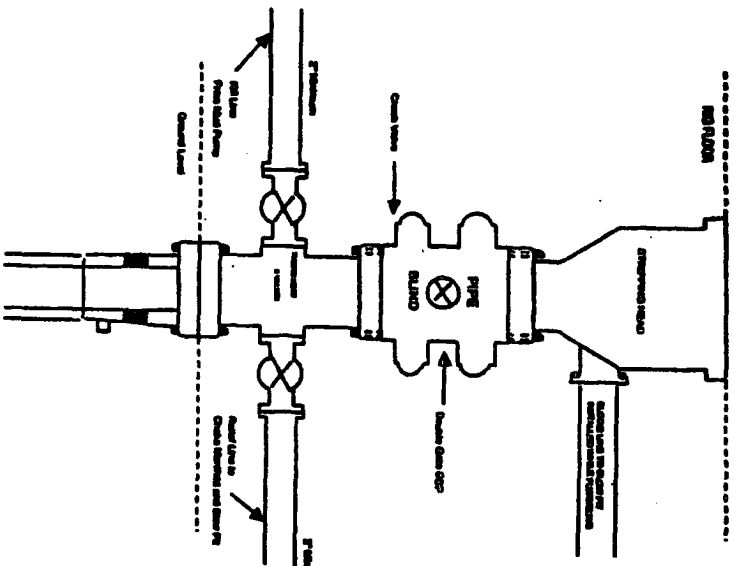
Choke manifold installation from Surface Casing Head to Total Depth, 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

BURLINGTON RESOURCES

Completion/Workover Rig BOP Configuration 2,000 psi System



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

Figure #2