

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 JUN 30 PM 2 54	5. Lease Number SF-079520-A Unit Reporting Number
1b. Type of Well GAS	RECEIVED OTO FARMINGTON NM	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 28-5 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 28-5 Unit 9. Well Number #81N	
4. Location of Well 930' FSL, 940' FWL Latitude 36° 37.6517'N, Longitude 107° 18.9523'W Latitude 36° 37.7142'N, Longitude 107° 19.3182'W	10. Field, Pool, Wildcat Blanco Mesaverde/Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 25, T28N, R5W surface Sec. 26, T28N, R5W bottom API # 30-039- 27822	
14. Distance in Miles from Nearest Town 10 miles to Gobernador	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 930'	17. Acres Assigned to Well MV 320 S/2 DK 320 S/2	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 75'	20. Rotary or Cable Tools Rotary	
19. Proposed Depth 8271'	22. Approx. Date Work will Start 6/30/04	
21. Elevations (DF, FT, GR, Etc.) 6913' GR		
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <i>Joni Clark</i> Regulatory Specialist	Date	

PERMIT NO.

APPROVAL DATE

APPROVED BY *D. Martinez*

TITLE *AFM*

DATE *1-24-05*

Archaeological Report attached

Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

HOLD C104 FOR *Directional Survey*

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27822		*Pool Code 71599/72319		*Pool Name Basin Dakota / Blanco Mesavende	
*Property Code 7460		*Property Name SAN JUAN 28-5 UNIT			
*OGRID No. 14538		*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP			*Well Number 81N
					*Elevation 6913'

¹⁰ Surface Location

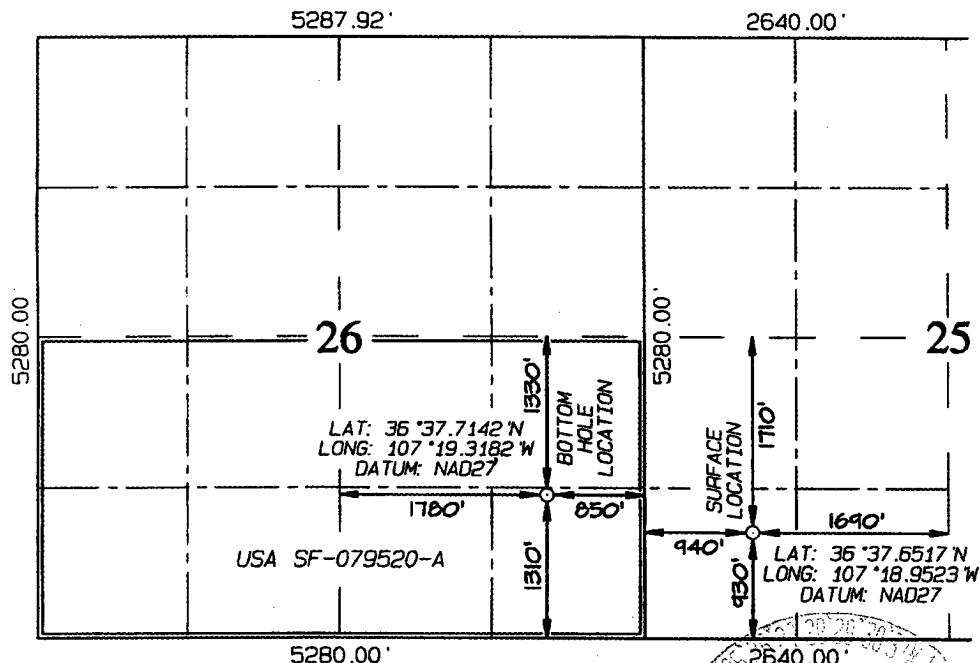
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	28N	5W		930	SOUTH	940	WEST	RIO ARriba

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
P	26	28N	5W		1310	SOUTH	850	EAST	RIO ARriba

¹² Dedicated Acres	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



¹⁷ OPERATOR CERTIFICATION

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

Signature
Jon Clark

Printed Name
Jon Clark

Title
Regulatory Specialist

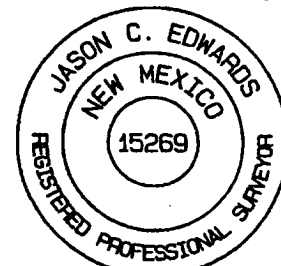
Date
6/30/04

¹⁸ SURVEYOR CERTIFICATION

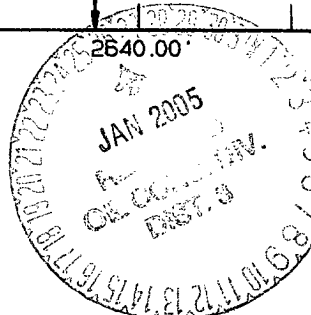
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: JUNE 30, 2004
Survey Date: SEPTEMBER 8, 2003

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269



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. 30-039-
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name San Juan 28-5 Unit
8. Well Number #81N
9. OGRID Number 14538
10. Pool name or Wildcat Blanco Mesaverde/Basin Dakota

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 M : 930 feet from the South line and 940 feet from the West line

Section 25 Township 28N Range 5W NMPM Rio Arriba County, NM

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

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL Sect Twp Rng Pit type Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >1000' Below-grade Tank Location UL Sect Twp Rng ;
feet from the line and feet from the line

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 COMPLETION ☐

OTHER: New Drill Pit ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND 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 an unlined pit as detailed in Burlington's general pit construction plan dated April 26, 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 Dollie Busse TITLE Regulatory Specialist DATE 4/27/04

Type or print name Dollie Busse E-mail address: dbusse@br-inc.com Telephone No. 326-9700

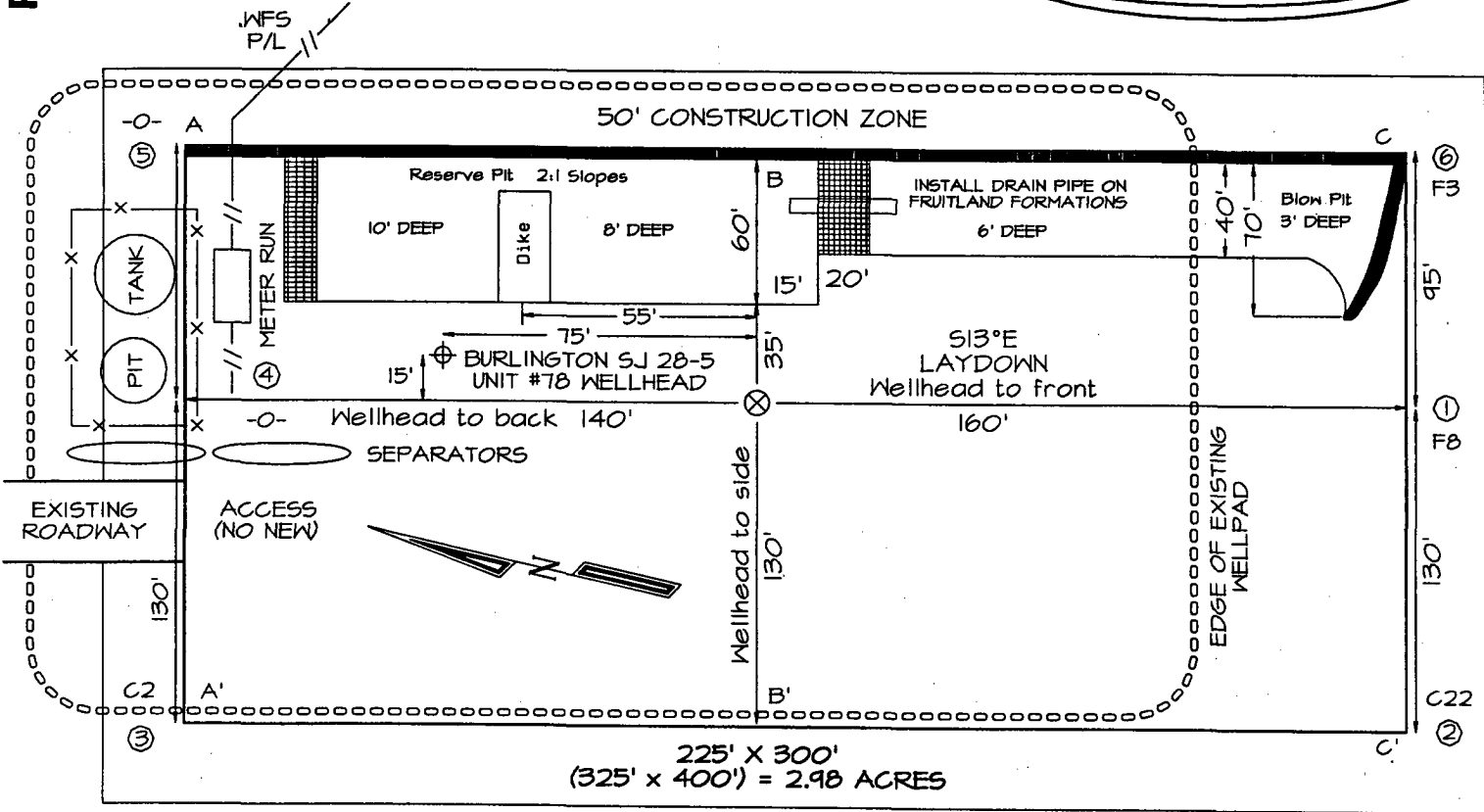
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APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE JAN 26 2005
Conditions of approval, if any:

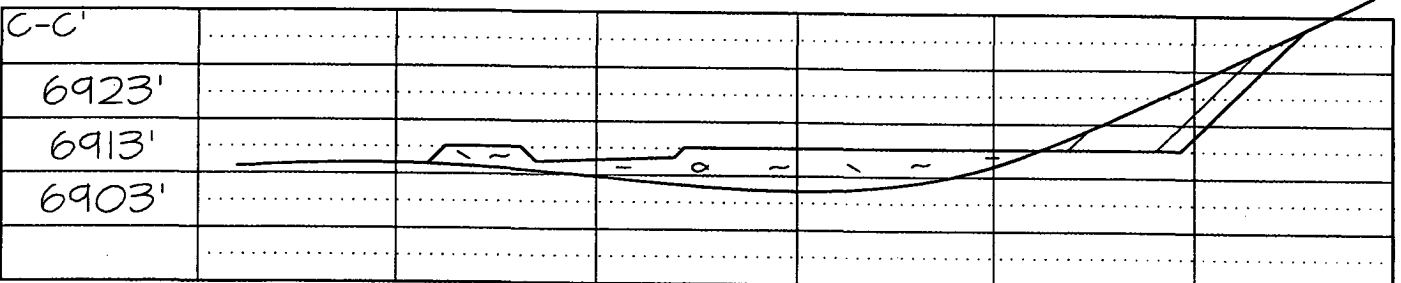
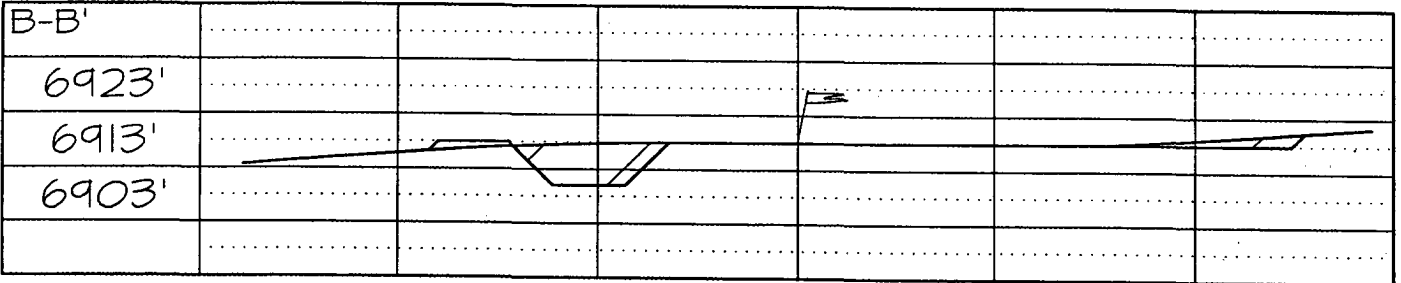
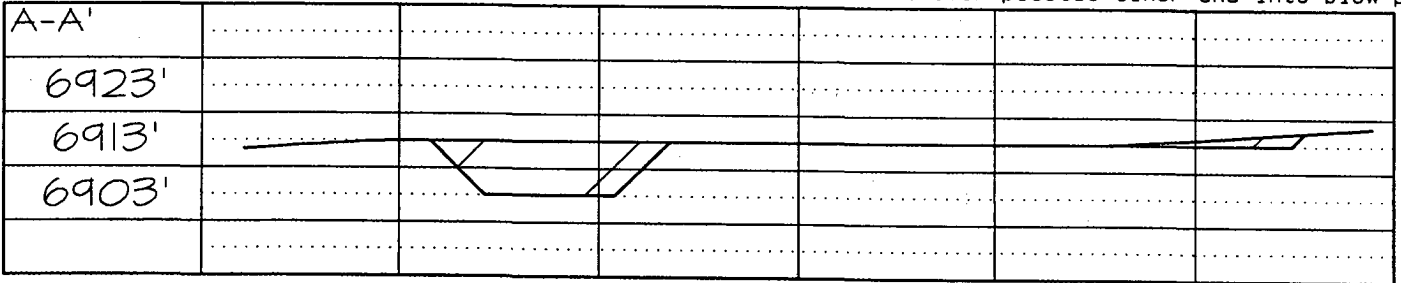
PLAT #

SAN JUAN 28-5 UNIT #81N, 930' FSL & 940' FWL
 SECTION 25, T28N, R5W, NMPM, RIO ARriba COUNTY, NM
 GROUND ELEVATION: 6913' DATE: SEPTEMBER 8, 2003

LATITUDE: 36°37'39"
 LONGITUDE: 107°18'57"
 DATUM: NAD1927



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: 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: San Juan 28-5 Unit #81N
Location: Surface -930' FSL, 940' FWL, Section 25, T-28-N, R-5-W
Bottom Hole - 1310' FSL, 850' FEL, Section 26, T-28-N, R-5-W
Rio Arriba County, New Mexico
Latitude 36° 37.6517'N, Longitude 107° 18.9523'W Surface Location
Latitude 36° 37.7142'N, Longitude 107° 19.3182'W Bottom Hole Location
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6913' GL

<u>Formation Tops:</u>	<u>TMD</u> <u>Top</u>	<u>TVD</u> <u>Top</u>	<u>TMD</u> <u>Bottom</u>	<u>Contents</u>
Surface	San Jose		3200'	
Ojo Alamo	3200'	3162'	3390'	aquifer
Kirtland	3390'	3344'	3640'	gas
Fruitland	3640'	3589'	3895'	
Pictured Cliffs	3895'	3821'	4090'	gas
Lewis	4090'	4013'	4520'	gas
Huerfanito Bentonite	4520'	4430'	4895'	gas
Chacra	4895'	4780'	5515'	gas
UpperCliff House	5515'	5387'	5715'	
Massive Cliff House	5715'	5588'	5800'	
Menefee	5800'	5646'	6110'	gas
Point Lookout	6110'	5972'	6720'	gas
Mancos	6720'	6530'	7425'	gas
Gallup	7425'	7218'	8180'	gas
Greenhorn	8180'	7934'	8215'	as
Graneros	8215'	8000'	8310'	gas
Dakota	8310'	8050'	8395'	gas
Upper Cubero	8395'	8142'	8445'	
Lower Cubero	8445'	8201'	8510'	
Oak Canyon	8510'	8251'		
TD	8535' MD	8271' TVD		

Logging Program:

Cased Hole - CBL-GR-TD to surface

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 500'	Spud	8.4-9.0	40-50	no control
500- 8538'	Non-dispersed	8.4-9.0	30-60	less than 8

Drilling:

Surface Hole:

Drill to surface casing point of 500' and set 9 5/8" casing.

Production Hole:

Mud drill to kick off point of 1200'. At this point the well will be directionally drilled by building 2.0 degrees per 100' with an azimuth of 282 degrees. The end of the build will be at a TVD of 1990', a TMD of 2000', hd of 111' and an angle of 16 degrees. This angle and azimuth will be held to a total depth of 8271' TVD and 8535' TMD

Materials:

Casing program:

<u>Hole Size</u>	<u>Interval</u>	<u>Size</u>	<u>Weight</u>	<u>Vis.</u>
	<u>TMD</u>	<u>TVD</u>		
12 1/4"	500'	500'	9 5/8"	32.3# H-40
7 7/8"	8535'	8271'	4 1/2"	10.5, 11.6# J-55, L-80

will only use L-80
per Joni Clark

Tubing Program:

2 3/8" 0' 8535' 2 3/8" 4.7# J-55

Wellhead Equipment

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

Cementing:

9 5/8" surface casing conventionally drilled -
Cement with 367 sacks Type III cement with 0.25 pps Celloflake, 3% calcium chloride. (470 cu ft-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.

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

4 1/2" production casing - Lead w/1357 sxs Premium Lite HS FM cement w/3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS. Tail w/90 sxs Type III cmt w/1% calcium chloride, 0.25 pps celloflake, 0.2% fluid loss (3016 cu ft, 50% excess to circulate to surface). If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC.

4 1/2" production casing alternative slurry- stage collar @ 6060' TMD'. First stage: pump 338 sxs Premium Lite HS FM w/ 3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS. Tail with 90 sxs Type III cmt w/1% calcium chloride, 0.25 pps celloflake, 0.2% fluid loss. Second stage: pump 970 sxs Premium Lite w/3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS (3016 cu ft of slurry, 50% excess).

BOP and Tests:

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

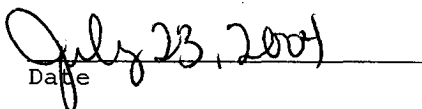
Surface to Total Depth - choke manifold (Reference Figure #2).

Pipe rams will be actuated at least once each day and blind rams will be actuated once each trip to test proper functioning. A Kelly cock valve and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

Additional Information:

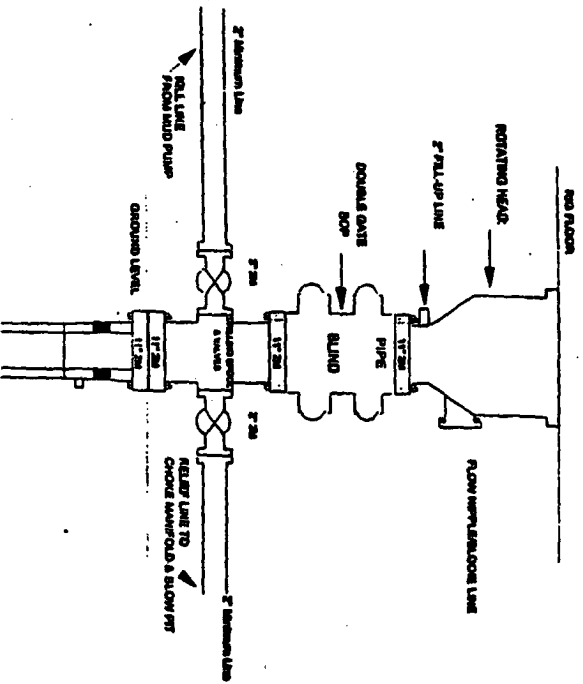
- This gas is dedicated.
- The east half of section 26 is dedicated to the Mesaverde and Dakota of this well.
- New casing will be utilized.
- Pipe movement (reciprocation) will be done if hole conditions permit.
- No abnormal pressure zones are expected.


Drilling Engineer


Date July 23, 2001

Burlington Resources

Drilling Rig 2000 psi System



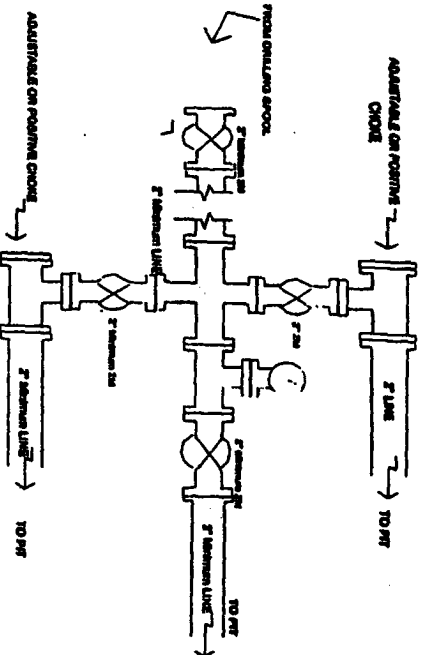
BCP installation from Surface Casing Point to Total Depth. 11\"/>

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 2000 psi System



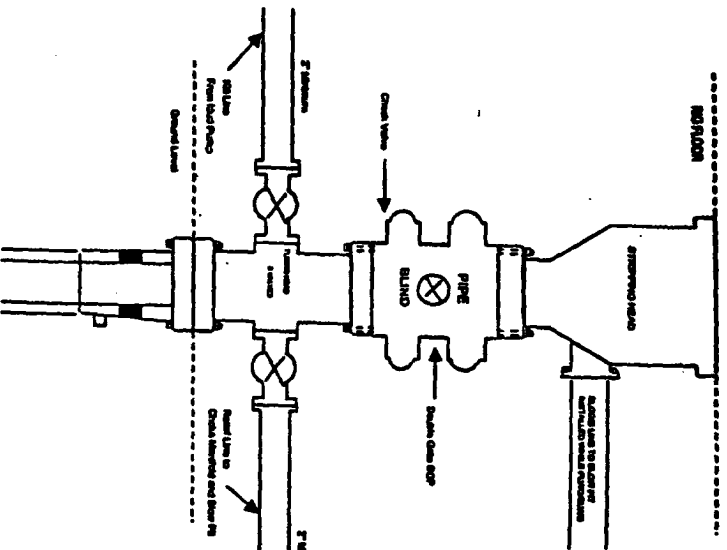
Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

BURLINGTON RESOURCES

Completion/Workover Rig BCP Configuration 2,000 psi System



Minimum BCP installation for all Completion/Workover Operations. 7-1/16\"/>

Figure #2