UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 MAR 1 PM 4 23

RECEIVED
070 FARMINGTON NM

1a. Type of Work
DRILL

1b. Type of Well
GAS

5. Lease Number
NMSF-079491
Unit Reporting Number
NMNM-078409B-MV NMNM-078494-DK

6. If Indian, All. or Tribe

2. Operator
BURLINGTON RESOURCES Oil & Gas Company

MAY 2006
RECEIVED
OIL CONS. DIV.
DIST. 3

7. Unit Agreement Name
San Juan 27-5 Unit

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499

(505) 326-9700

8. Farm or Lease Name
San Juan 27-5 Unit
9. Well Number
#104N

4. Location of Well
1340' FNL, 1115' FWL Surface Hole
710' FNL, 2590' FWL' Bottom Hole
Latitude 36° 35.4985'N, Longitude 107° 18.1178'W-SHL E
Latitude 36° 35.5910'N, Longitude 107° 18.5531'W-BHL C

10. Field, Pool, Wildcat
Basin Dakota/Blanco Mesaverde
11. Sec., Twn, Rge, Mer. (NMPM)
Sec. 12, T27N, R05W
API # 30-039- 29824

14. Distance in Miles from Nearest Town
13 miles to Gobernador, NM

12. County
Rio Arriba

13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line
1115'

16. Acres in Lease

17. Acres Assigned to Well
W/2 320 acres MV
N/2 320 acres DK

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
75'

19. Proposed Depth
8608'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
7313' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Jami Clark
Regulatory/Compliance Specialist

3/1/06
Date

PERMIT NO.

APPROVAL DATE

APPROVED BY D. Montoya TITLE AFM DATE 5/8/06

NMOCD

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

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.

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

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED

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

District II
PO Drawer DD, 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

2006 MAR 1 PM 4 23

RECEIVED
070 FARMINGTON NM

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

[1] API Number	[2] Pool Code	[3] Pool Name
30- 039 - 29824	72319/71599	Blanco Mesaverde/Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Number
7454	SAN JUAN 27-5 UNIT	104N

[7] OGRID No.	[8] Operator Name	[9] Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY, LP	7313'

[10] Surface Location

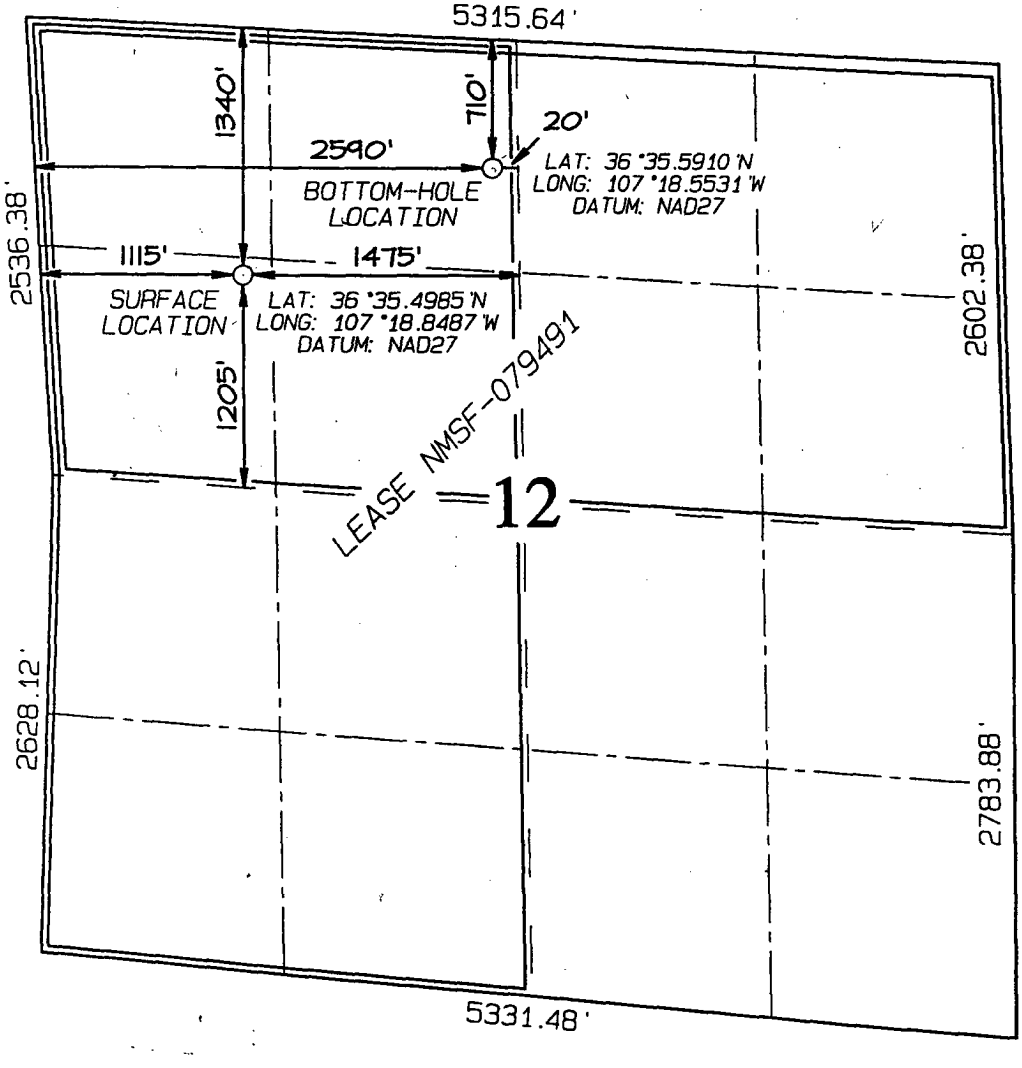
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	27N	5W		1340	NORTH	1115	WEST	RIO ARRIBA

[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
C	12	27N	5W		710	NORTH	2590	WEST	RIO ARRIBA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
MV W/2 320 DK N/2 320			

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

Joni Clark
Printed Name

Senior Regulatory Specialist
Title

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 belief.

Date Revised: AUGUST 31, 2005
Date of Survey: APRIL 21, 2005

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

*Submit 3 Copies To Appropriate District 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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30-039- 29824

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No. SF-079491

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.)

7. Lease Name or Unit Agreement Name: San Juan 27-5 Unit

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

8. Well Number: #104N

2. Name of Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP

9. OGRID Number: 14538

3. Address of Operator: 3401 E. 30TH STREET, FARMINGTON, NM 87402

10. Pool name or Wildcat: Blanco Mesaverde/Basin Dakota

4. Well Location
Unit Letter E : 1340 feet from the North line and 1115 feet from the West line
Section 12 Township 27N Rng 5W NMPM County Rio Arriba

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 7313'

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type Workover Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >200' <1000'

Pit Liner Thickness: n/a 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:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
OTHER:	Workover Pit		☒	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.

Workover, Unlined:

Burlington Resources proposes to construct a workover pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the workover pit will be an unlined 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 workover, a vent/flare pit may be the only pit that will be required. A portion of this vent/flare pit will be designed to manage fluids, and that portion will be unlined, 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 Sr. Regulatory Specialist DATE 2/9/2006

Type or print name Joni Clark E-mail address: jclark@br-inc.com Telephone No. 505-326-9701

For State Use Only

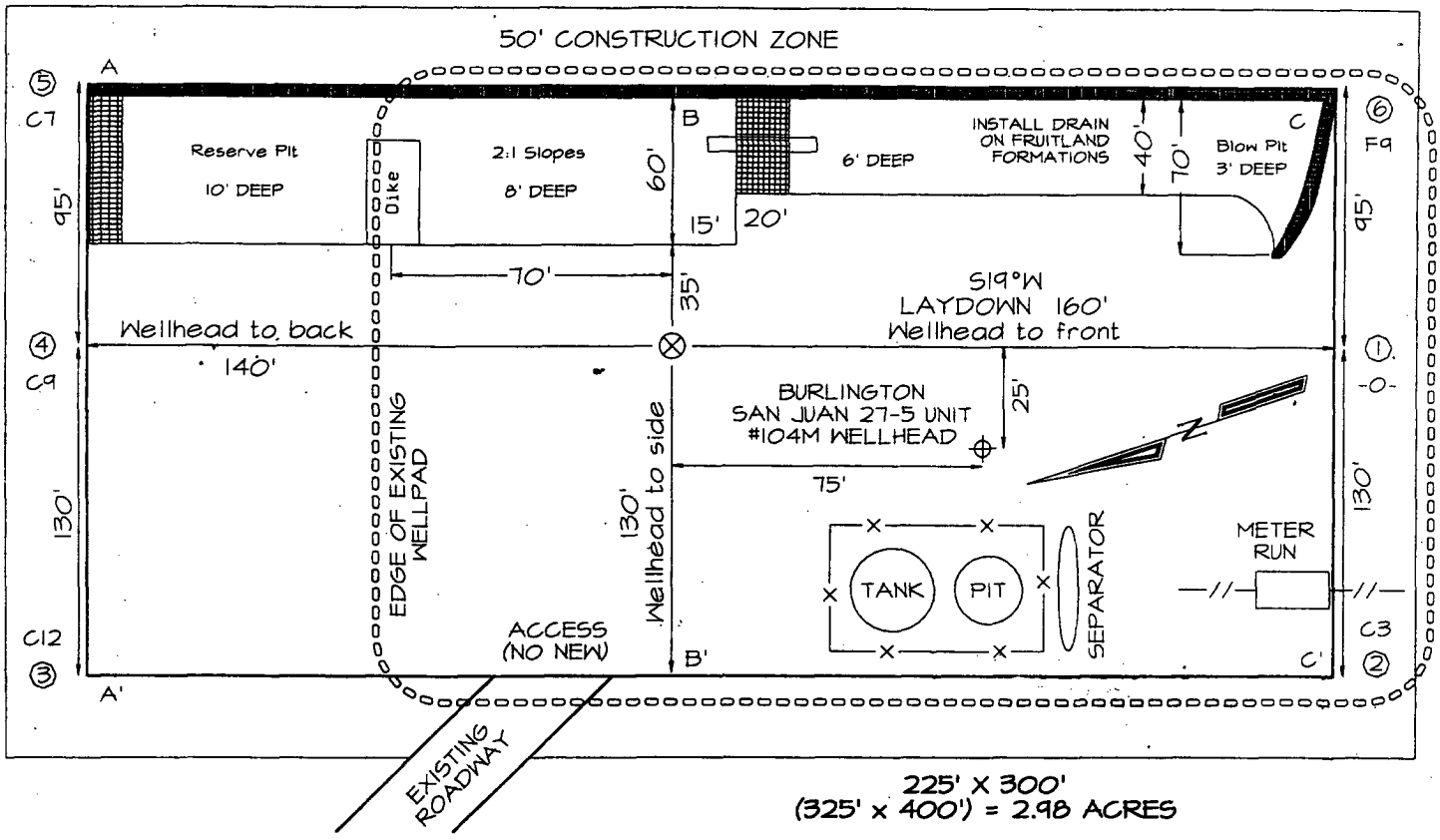
APPPROVED BY _____ TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE MAY 11 2006

Conditions of Approval (if any):

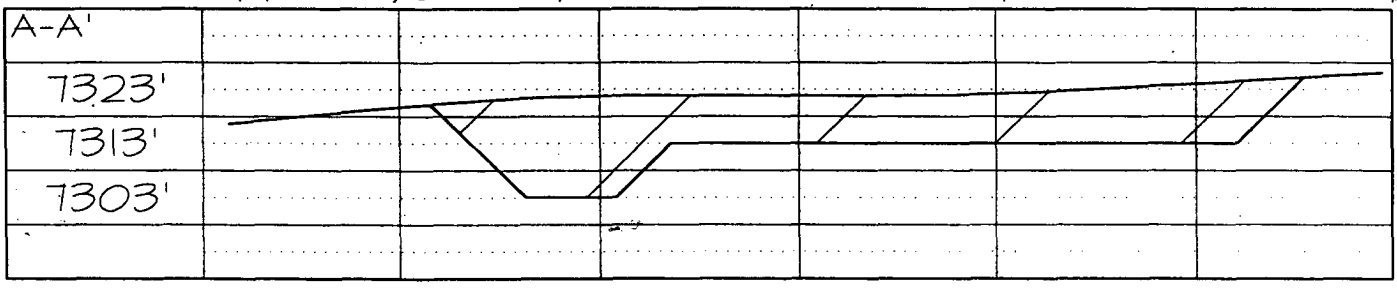
PLAT #1

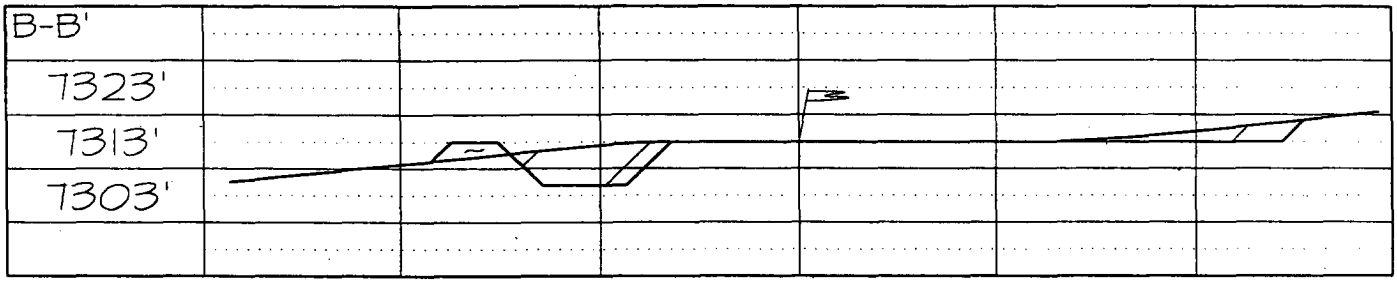
BURLINGTON RESOURCES OIL & GAS COMPANY, LP
SAN JUAN 27-5 UNIT #104N, 1340' FNL & 1115' FWL
SECTION 12, T27N, R5W, NMPM, RIO ARRIBA COUNTY, NM
GROUND ELEVATION: 7313' DATE: APRIL 21, 2005

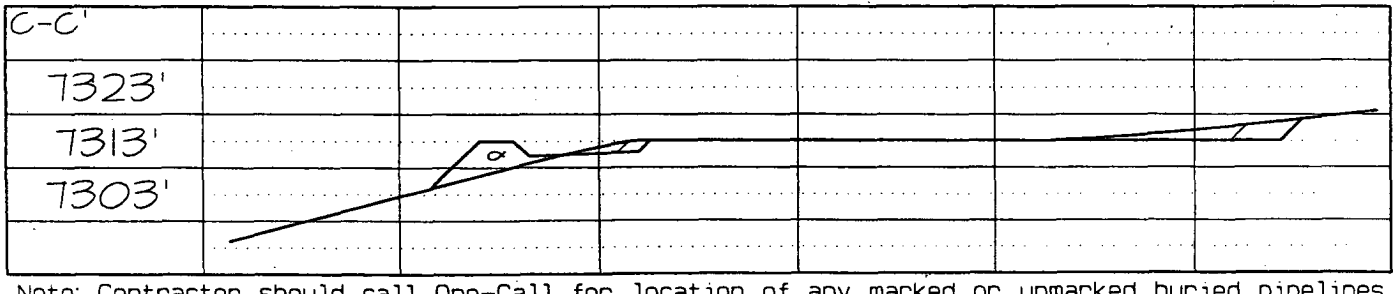
LATITUDE: 36°35'30"
LONGITUDE: 107°18'51"
DATUM: NAD1927



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

SAN JUAN 27-5 UNIT #104N OPERATIONS PLAN

Well Name: San Juan 27-5 Unit #104N

Location Rio Arriba County, New Mexico
Surface: 1340' FNL, 1115' FWL, Section 12, T-27-N, R-5-W
Latitude 36° 35.4985'N, Longitude 107° 18.8487'W
Bottom Hole: 710' FNL, 2590' FWL, Section 12, T-27-N, R-5-W
Latitude 36° 35.5910'N, Longitude 107° 18.5531'W

Formation Blanco Mesa Verde/Basin Dakota

Elevation 7313' GL

Formation Tops	***Top (TVD)***	***Top (TMD)***	***Contents***
Surface	San Jose		
Ojo Alamo	3562'	3734'	aquifer
Kirtland	3728'	3910'	gas
Fruitland	3944'	4139'	gas
Pictured Cliffs	4183'	4393'	gas
Lewis	4327'	4546'	gas
Huerfanito Bentonite	4612'	4848'	gas
Chacra	5132'	5389'	gas
Intermediate set point: 150' into Chacra			
Upper Cliff House	5743'	6000'	
Menefee	5987'	6244'	gas
Massive Point Lookout	6329'	6586'	gas
Mancos	6857'	7114'	gas
Gallup	7501'	7758'	gas
Greenhorn	8264'	8521'	gas
Graneros	8325'	8582'	gas
Two Wells	8362'	8619'	gas
Upper Cubero	8480'	8736'	gas
Lower Cubero	8520'	8777'	gas
Oak Canyon	8588'	8844'	
Encinal	8608'	8865'	
TD	**8608'**	**8865'**	

Logging Program
Cased Hole – CBL-GR- TD to surface
Open Hole - None

Mud Program

Interval (TMD)	Type	Weight	Vis.	Fluid Loss
0- 350'	Spud	8.4-9.0	40-50	no control
350- 5539	Non-dispersed	8.4-9.0	30-60	less than 8
5539'- 8865'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

Drilling (Reference Plot #1)

Surface Hole
Drill to surface casing point of 350' and set 9 5/8" casing.

Intermediate Hole
Mud drill to kick off point of 400'. At this point the well will be directionally drilled by building 4.0 degrees per 100' with an azimuth of 68.52 degrees. The end of the build will be at a TVD of 877', a TMD of 888', a reach of 82', and an angle of 19.47 degrees. This angle and azimuth will be held to a TVD of 4805', a TMD of 5052', and a reach of 1470'. At this point the well will be drilled with a drop of 4.0 degrees per 100'. The end of the drop will be at a TVD of 5282', a TMD of 5539', a reach of 1552', and an angle of 0.0 degrees. 7" casing will be set at this point.

Production Hole
From the shoe of the intermediate string, the well will be drilled vertically with an air hammer to a TMD of 8865' (TVD of 8608'). 4 ½" casing will be set at this point.

Materials

Casing program

Hole Size	Interval (TMD)	Csg. Size	Weight	Grade
12 1/4"	0' - 350'	9 5/8"	32.3#	H-40
8 3/4"	350' - 5539'	7"	23#	L-80
6 1/4"	5539' - 8865'	4 ½"	11.6#	L-80

Tubing Program

Hole Size	Interval (TMD)	Csg. Size	Weight	Grade
2 3/8"	0' – 8865'	2 3/8"	4.7#	J-55

Wellhead Equipment

9 5/8" x 7" X 4 1/2" x 2 3/8" – 11" (2000 psi) wellhead assembly

Cementing:

9 5/8" surface casing conventionally drilled: ***200%*** *excess cement to bring cement to surface*
Run **329 ft^3 (257 sks)** Type III cement with 3% $CaCl_2$ and 1/4 pps celloflake (1.28 sks/ ft^3). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60° 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.

7" production casing: ***50%*** *excess cement to bring cement to surface*
Lead with **1125 ft^3 (528 sks)** Premium Lite w/ 3% $CaCl_2$, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52 and 0.4% SMS (2.13 sks/ft^3). Tail with **124 ft^3 (90 sks)** Type III cmt. w/ 1% $CaCl_2$, 0.25 pps Cello-Flake and 0.2% FL-52 (1.38 sks/ft^3). If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC.

4 ½" production casing: ***30%*** *excess cement to achieve 100' overlap with intermediate casing*
Run **455 ft^3 (230 sks)** Premium Lite HS FM + 0.25pps Cello-Flake, 0.3% CD-32, 6.25pps LCM-1, 1% FL-52 (1.98 sks/ft^3).

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

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.
BOPE tests will be performed using an appropriately sized test plug and test pump and will be recorded using calibrated test gauges and a properly calibrated strip or chart recorder. The test will 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 noted in the 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 the 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 BOPE will be exposed. Casing pressure tests must be held for 30 minutes with no more than 10 percent pressure drop during the duration of the test.

Additional Information:

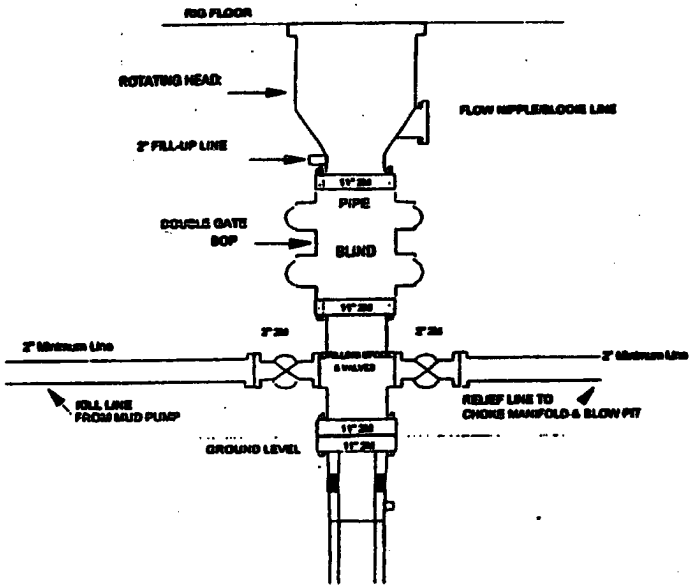
- This gas is dedicated.
- The West and South half of section 12 is dedicated to the Mesaverde and Dakota of this well.
- New casing will be utilized.
- Pipe movement (reciprocation) will be done if hole conditions permit.
- No abnormal pressure zones are expected.
- BHP is expected to be 2000 psi.

2/26/06

Drilling Engineer Date

Burlington Resources

Drilling Rig
2000 psi System



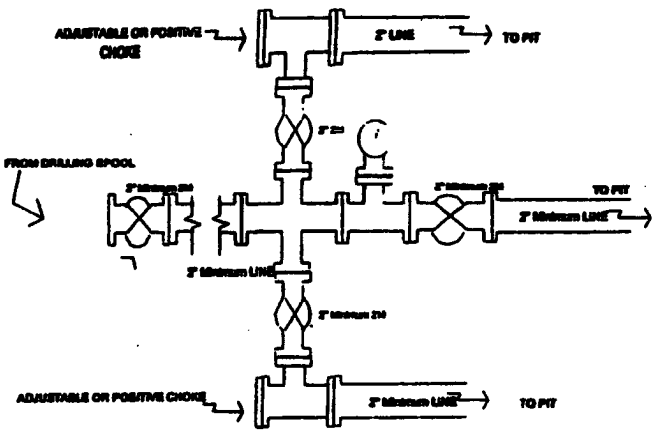
BOP installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 600 psi rotating head on top of ram preventers. All BOP equipment is 2,000 psi working pressure

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System



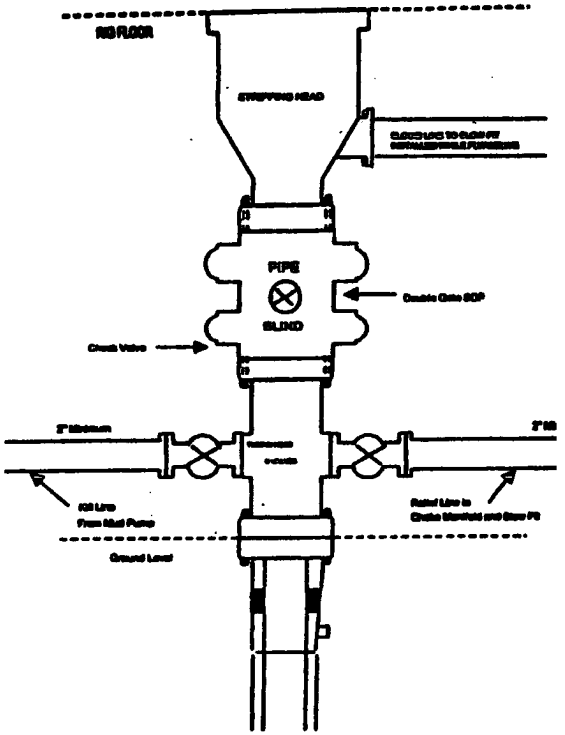
Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

BURLINGTON RESOURCES

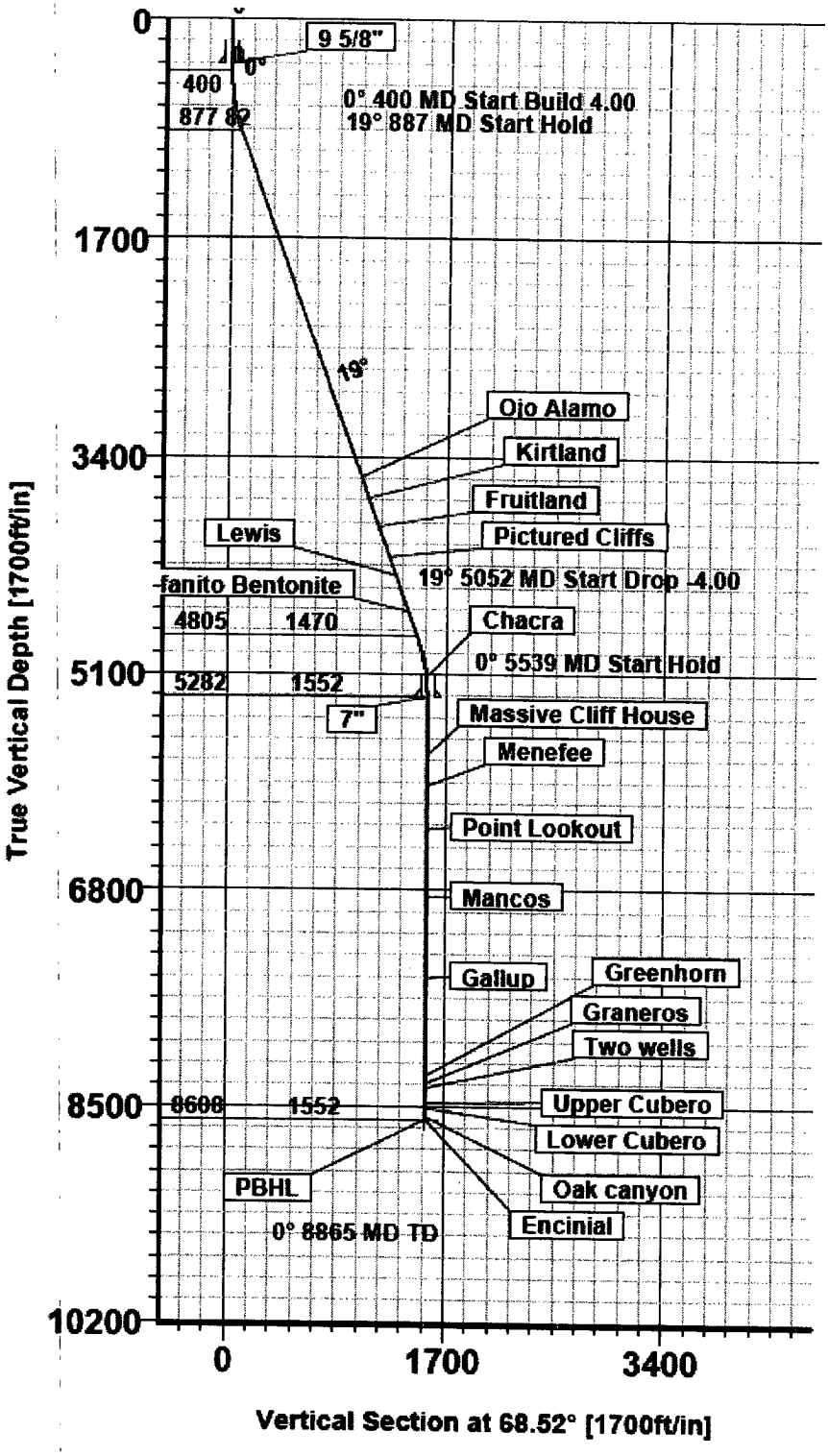
Completion/Workover Rig
BOP Configuration
2,000 psi System



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 600 psi stripping head.

Figure #2

4-20-01



Plot 1: Directional plan for SJ 27-5 104N