UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a.	Type of Work DRILL	5. Lease Number SF-079266 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 Vaughn 9. Well Number #12N
4.	Location of Well Unit E (SWNW), 1430' FNL & 660' FWL, Latitude 36° 27.6700'N Longitude 108° 26.6030'W	10. Field, Pool, Wildcat Basin DK/ Blanco MV 11. Sec., Twn, Rge, Mer. (NMPM) E Sec. 26, T26N, R6W API # 30-039- 30022
14.	Distance in Miles from Nearest Town 48.8 miles to Bloomfield, NM	12. County Rio Arriba 13. State NM
15.	Distance from Proposed Location to Nearest Property or Lease Line 660'	
16.	Acres in Lease	17. Acres Assigned to Well W/2 MV/DK 320
18.	Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 1263' Vaughn #12M	
19.	Proposed Depth 7092'	20. Rotary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, Etc.) 6352' GR	22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: _____ 8/7/06
Regulatory Analyst Date

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE AFM DATE 9/18/06

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.
This well is NOT in the HPA area.

NMOCD

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 "GENERAL REQUIREMENTS".

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

DISTRICT II
1301 West Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 S. 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 October 12, 2005

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- 30022	71599/72319	Basin Dakota / Blanco Mesaverde

[4] Property Code	[5] Property Name	[6] Well Number
7623	VAUGHN	12N

[7] OGRID No.	[8] Operator Name	[9] Elevation
14538	BURLINGTON RESOURCES OIL AND GAS COMPANY LP	6352'

[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	26	26-N	6-W		1430'	NORTH	660'	WEST	RIO ARRIBA

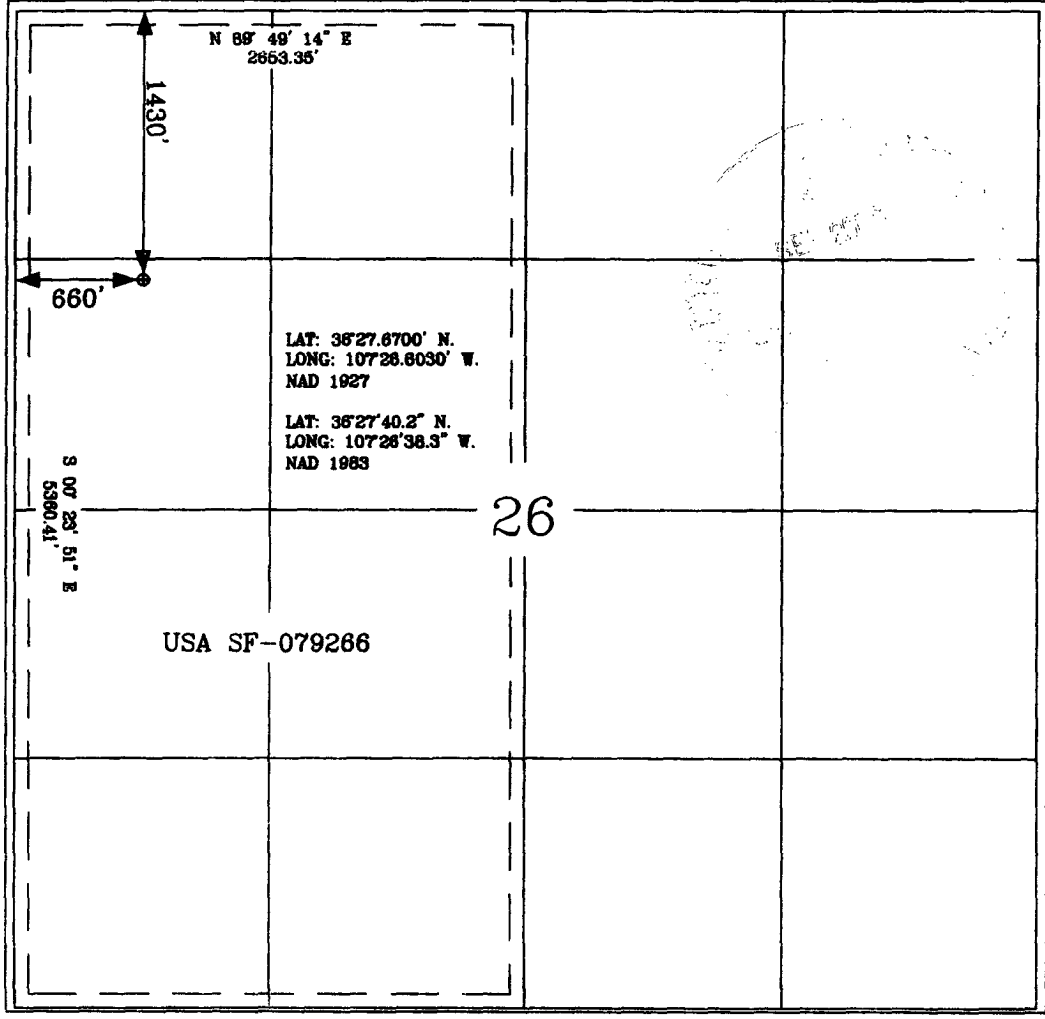
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E									

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
MV/DK 320.0 ac W2			

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, 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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature

Philana Thompson
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: 6-[illegible]-2006

Signature and Seal of Professional Surveyor:

GLEN W. RUSSELL
NEW MEXICO
15703
LICENSED PROFESSIONAL SURVEYOR

Certificate Number 15703

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
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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-

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No. Federal Lease - SF-079266

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: Vaughn

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

8. Well Number: 12N

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: Mesaverde / Dakota

4. Well Location
Unit Letter E : 1430' feet from the North line and 660' feet from the West line
Section 26 Township 26N Rng 6W NMPM County: Rio Arriba

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

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: 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:		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.

SEP 2006

New Drill, Unlined:

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 and vent/flare 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. A portion of the vent/flare pit will be designed to manage fluids, and that portion will be unlined, 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 that 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 Analyst DATE 7/12/2006

Type or print name Philana Thompson E-mail address: pthompson@br-inc.com Telephone No. 505-326-9700

For State Use Only

APPPROVED BY TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE SEP 20 2006

Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP

VAUGHN #12N, 1430' FNL & 660' FWL

SECTION 26, T-26-N, R-6-W, NMPM, RIO ARRIBA COUNTY, NM

GROUND ELEVATION: 6352', DATE: MAY 25, 2006

LATITUDE: 36° 27.6700'N LONGITUDE: 107° 26.6030'W NAD27

NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPLINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).

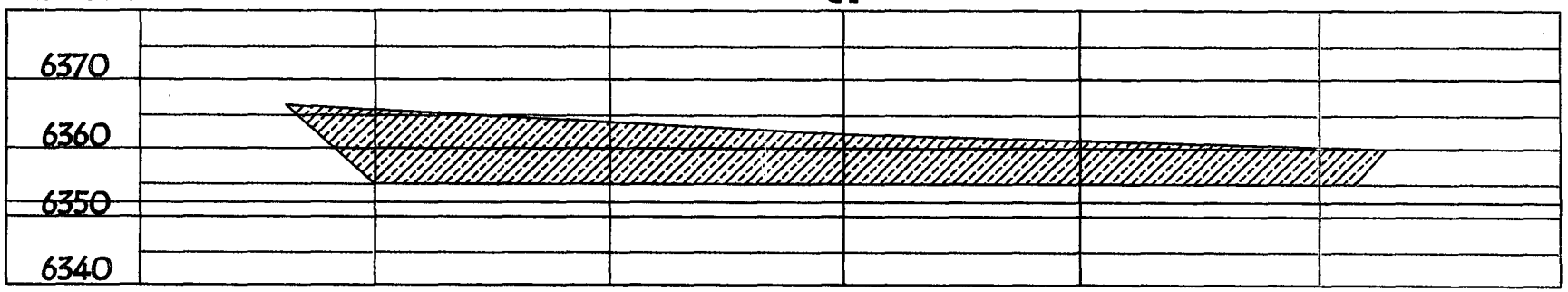
BURLINGTON RESOURCES OIL & GAS COMPANY LP

VAUGHN #12N, 1430' FNL & 660' FWL

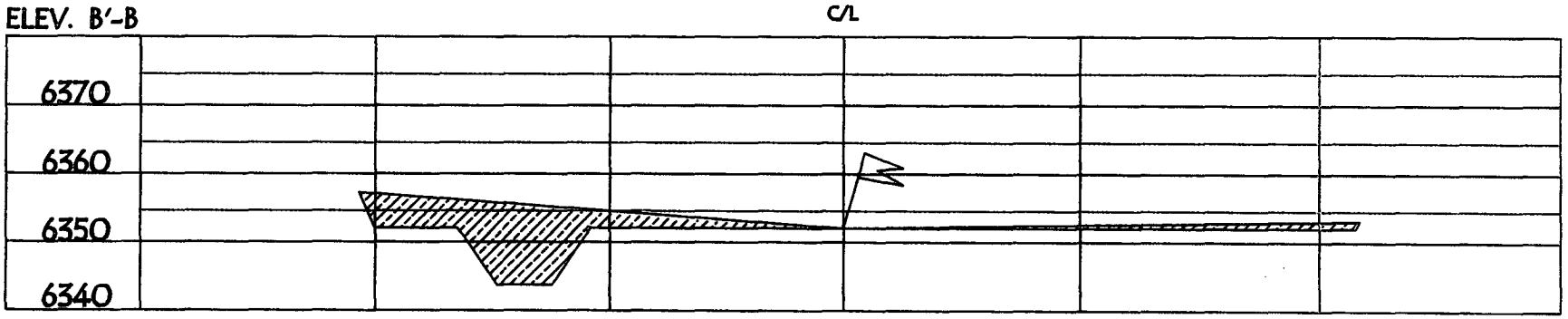
SECTION 26, T-26- N, R-6-W, NMPM, RIO ARRIBA COUNTY, NM

GROUND ELEVATION: 6352', DATE: MAY 25, 2006

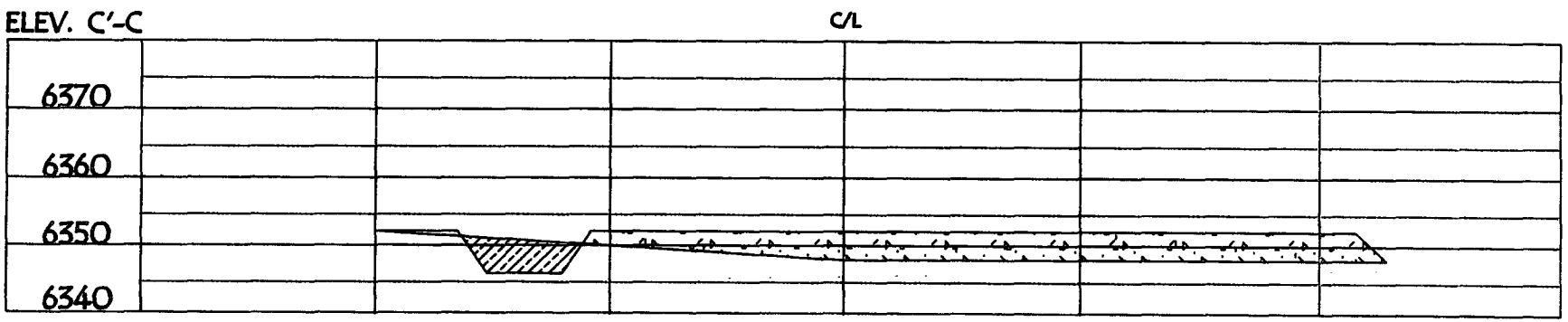
ELEV. A'-A



ELEV. B'-B



ELEV. C'-C



NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED
PIPLINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

OPERATIONS PLAN

Well Name: VAUGHN 12N
Location: 1430' FNL & 660' FWL, Section Sec 26 T26N R06W
Rio Arriba County, New Mexico

Formation: Basin Dakota/Blanco Mesaverde
Elevation: 6352' GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2019'	
Ojo Alamo	2019'	2179'	aquifer
Kirtland	2179'	2484'	gas
Fruitland Coal	2484'	2636'	gas
Pictured Cliffs	2636'	2759'	gas
Lewis	2759'	3069'	
Huerfanito Bentonite	3069'		
Chacra	3511'	4284'	gas
Massive Cliff House	4284'	4319'	gas
Menefee	4319'	4864'	gas
Massive Point Lookout	4864'	5209'	gas
Mancos Shale	5209'	5939'	
Upper Gallup	5939'	6778'	gas
Greenhorn	6778'	6832'	gas
Graneros	6832'	6873'	gas
Two Wells	6873'	6986'	gas
Upper Cubero	6986'	7019'	gas
Lower Cubero	7019'	7092'	gas
Encinal	7092'	7092'	gas
Total Depth:	7092'		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:

Interval	Type	Weight	Vis.	Fluid Loss
0 - ~~120'~~ 200	Spud MUD/Air/Air Mist	8.4 - 9.0	40 - 50	no control
120- 2859'	LSND	8.4 - 9.0	30 - 60	no control
2859' - 7092''	Air/Air Mist/Nitrogen	n/a	n/a	n/a

C. HARRADEN/ August 9, 2006

BURLINGTON RESOURCES/ Vaughn #12N APD
STIPULATION/CONDITION OF APPROVAL

This well is located within a 'vulnerable area'. In order to protect the integrity of the fresh water alluvium aquifer, a minimum surface csg. depth of 200' is stipulated as a condition of approval for this APD.

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

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - ~~120'~~ 200	9 5/8"	32.3#	H-40
8 3/4"	0' - 2859'	7"	20#	J-55
6 1/4"	0' - 8052'	4 1/2"	10.5#/11.6#	J-55

Tubing Program:

Depth Interval	Csg.Size	Wt.	Grade
0' - 8052'	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 ½" 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 [redacted] Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. [redacted] 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 188 sx Type III cement with 0.25 pps Celloflake, 2% CaCl. (303 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 241 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/13 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: 228 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (638 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 @ 2179'. Two turbolating centralizers at the base of the Ojo Alamo @ 2179'. 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 277 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 (548 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:

- The Mesa Verde and Dakota formations will be completed and commingled.
- 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

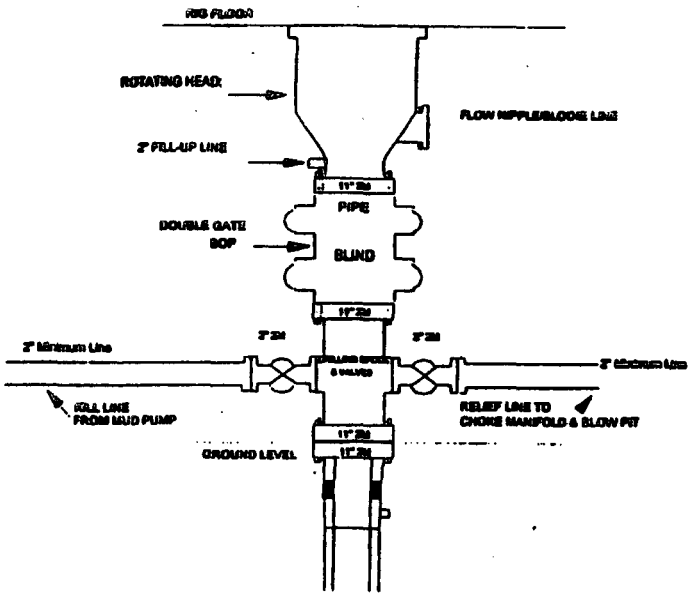
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The W/2 half of Section 26 is dedicated to the MV/DK formation
- This gas is dedicated.

Drilling Engineer

7/14/06
Date

Burlington Resources

Drilling Rig
2000 psi System



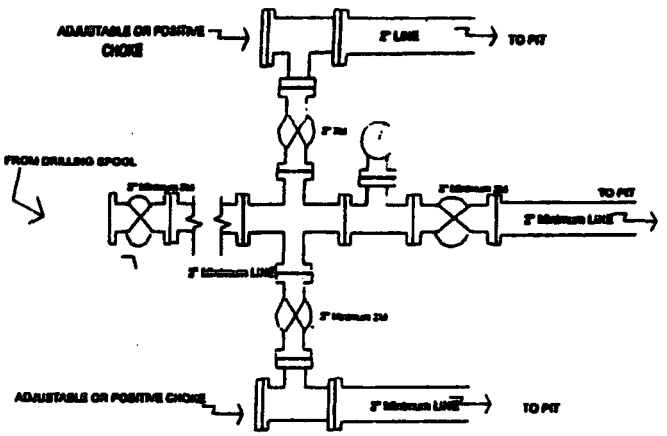
BOP installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rotating head on top of ram preventers. All BOP equipment is 2,000 psi working pressure

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System

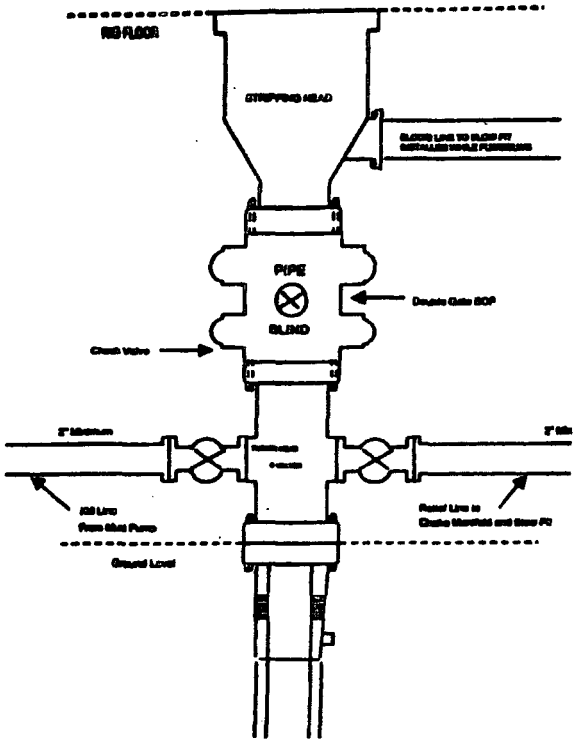


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

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