

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 NMSF-078138 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 Morris 9. Well Number 1038 |
| 4. Location of Well Unit O (SWSE), 910' FSL & 1600' FEL, Latitude 36° 46.7205'N Longitude 107° 59.5141'W | 10. Field, Pool, Wildcat Basin FC / Aztec PC 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 28, T30N, R11W API # 30-045- 33564 |
| 14. Distance in Miles from Nearest Town | 12. County San Juan 13. State NM |
| 15. Distance from Proposed Location to Nearest Property or Lease Line 910' | 17. Acres Assigned to Well FC - 320.76 W/2; PC-160.760 NE/4 320.08 |
| 16. Acres in Lease | |
| 18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease Dryhole Federal B #1 | |
| 19. Proposed Depth 2536' | 20. Rotary or Cable Tools Rotary |
| 21. Elevations (DF, FT, GR, Etc.) 6020' GL | 22. Approx. Date Work will Start |
| 23. Proposed Casing and Cementing Program See Operations Plan attached | |
| 24. Authorized by: <u>Patsy Clugst</u> Sr. Regulatory Specialist | Date <u>1/26/06</u> |

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

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.

Not an HPA FC Well

DRILLING OPERATIONS AUTHORIZED APP
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

NMOC

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

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

2000 JAN 30 PM 4 29

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|--|---|--|
| ¹ API Number 30-045- 33564 | ² Pool Code 71629 / 71280 | ³ Pool Name Basin Fruitland Coal / Aztec Pictured Cliffs |
| ⁴ Property Code 7324 | ⁵ Property Name MORRIS | ⁶ Well Number 103S |
| ⁷ GRID No. 14538 | ⁸ Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP | ⁹ Elevation 6020' |

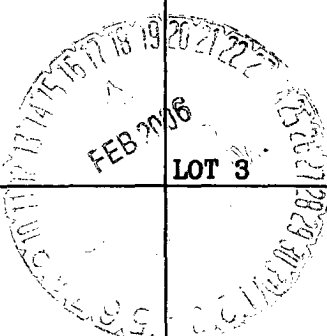
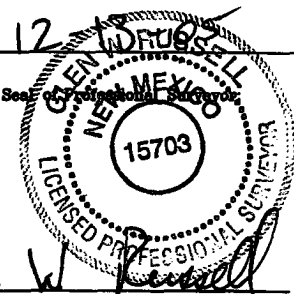
¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| 0 | 28 | 30-N | 11-W | | 910' | SOUTH | 1600' | EAST | 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 |
|--|---------|----------|-------------------------------|---------|----------------------------------|------------------|-------------------------|----------------|--------|
| 0 | | | | | | | | | |
| ¹² Dedicated Acres PC- 160.760 acres SE/4 FC - 314.24 acres E/2 320.08 | | | 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

| | | | |
|---|--|---|--|
| ¹⁶ | | ¹⁷ OPERATOR CERTIFICATION | |
|  | | I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief | |
| LOT 3 | | Signature <i>Patsy Clugston</i> | |
| LOT 2 | | Printed Name Patsy Clugston | |
| LOT 1 | | Title Sr. Regulatory Specialist | |
| USA SF-078138 | | Date 12-15-05 | |
| LOT 4 | | Date 12-15-05 | |
| LOT 5 | | ¹⁸ SURVEYOR CERTIFICATION | |
| 28 | | 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. | |
| LOT 6 | | Date of Survey 12-15-05 | |
| LOT 7 | | Signature and Seal of Professional Surveyor  | |
| LOT 11 | | Certificate Number 15703 | |
| LOT 10 | | | |
| LOT 9 | | | |
| LOT 8 | | | |
| USA SF-078138 | | | |
| LOT 15 | | | |
| LAT: 36°48.7205' N. LONG: 107°59.5141' W. NAD 1927 | | | |
| LOT 12 | | | |
| LOT 13 | | | |
| LOT 14 | | | |

Office

Energy, Minerals and Natural Resources

May 27, 2004

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.

30-045-

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

Federal Lease - NMSF-078138

7. Lease Name or Unit Agreement Name

Morris

8. Well Number

#103S

9. OGRID Number

14538

10. Pool name or Wildcat

Basin FC/ Aztec PC

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 O : 910' feet from the South line and 1600' feet from the East line
Section 28 Township 30N Range 11W NMPM County San Juan

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

6020" GR

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

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 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 Associate II

DATE

1/4/2006

Type or print name

Philana Thompson

E-mail address:

pthompson@br-inc.com

Telephone No.

505-326-9530

For State Use Only

APPROVED BY

TITLE

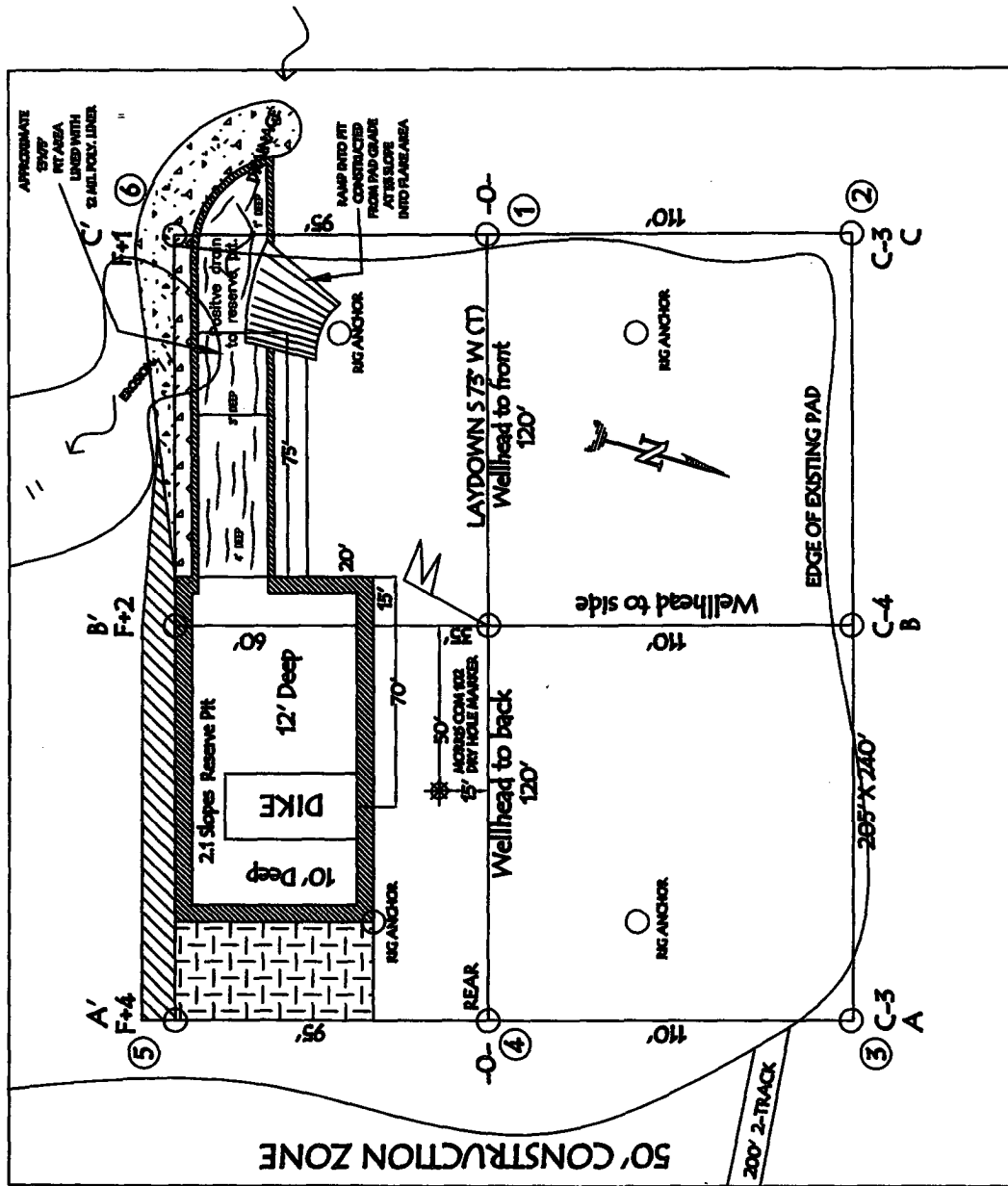
DEPUTY OIL & GAS INSPECTOR, DIST. 68

DATE

FEB 17 2006

Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP MORRIS 103S, 910' FSL & 1600' FEL SECTION 28, T-30-N, R-11-W, NMPM, SAN JUAN COUNTY, NM GROUND ELEVATION: 6020', DATE: DECEMBER 1, 2005



305' X 340' = 2.38 ACRES

LATITUDE: 36° 46.7205' N LONGITUDE: 107° 59.5141' W NAD27

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

NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.

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.

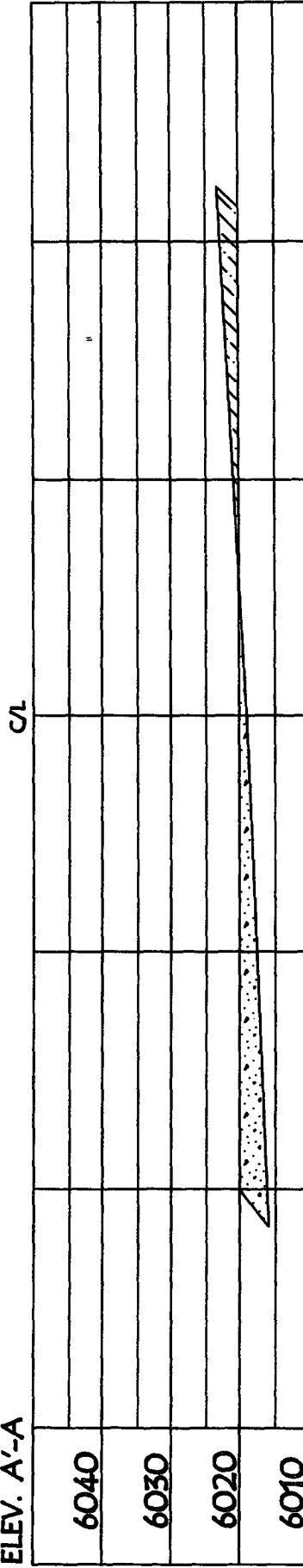
BURLINGTON RESOURCES OIL & GAS COMPANY LP

MORRIS 1035, 910' FSL & 1600' FEL

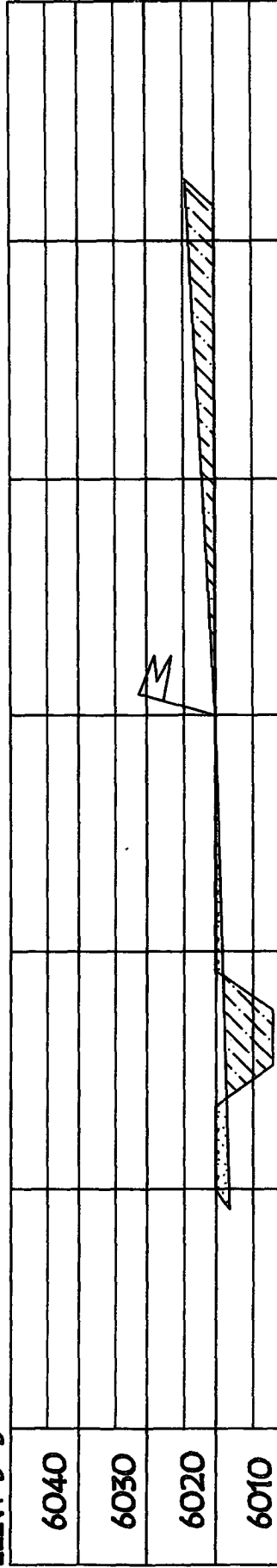
SECTION 28, T-30-N, R-11-W, NMPM, SAN JUAN COUNTY, NM

GROUND ELEVATION: 6020', DATE: DECEMBER 1, 2005

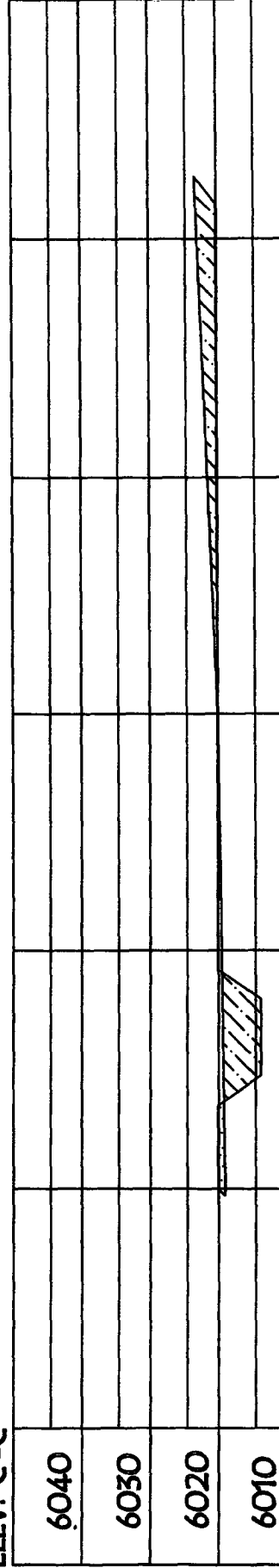
ELEV. A'-A



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
PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

OPERATIONS PLAN

Well Name: Morris 103S
Location: Unit O (SWSE), 910' FSL & 1600' FEL, Sec. 28, T30N, R11W
 San Juan County, New Mexico
 Latitude 36° 46.7205'N Longitude 107° 59.5141' W
Formation: Basin Fruitland Coal & Pictured Cliffs
Elevation: 6020' GR

| Formation: | Top | Bottom | Contents |
|--------------------|--------------|--------|----------|
| Ojo Alamo | 958' | 1052' | aquifer |
| Kirtland | 1052' | 2053' | gas |
| T/Fruitland | 2053' | | gas |
| Pictured Cliffs | 2336' | | |
| Total Depth | 2536' | | |

Logging Program: None

Mud Program:

| <u>Interval</u> | <u>Type</u> | <u>Weight</u> | <u>Vis. Fluid Loss</u> |
|-----------------|-------------------|---------------|------------------------|
| 0- 120' | Spud/Air/Air Mist | 8.4-8.9 | 40-50 no control |
| 120-2536' | Non-dispersed | 8.4-9.5 | 30-60 no control |

Casing Program:

| <u>Hole Size</u> | <u>Depth Interval</u> | <u>Csg. Size</u> | <u>Wt.</u> | <u>Grade</u> |
|-------------------|-----------------------|------------------|------------|--------------|
| 8 $\frac{3}{4}$ " | 0 - 120' | 7" | 20.0# | J-55 |
| 6 $\frac{1}{4}$ " | 0 - 2536' | 4 1/2" | 10.5# | J/K-55 |

Tubing Program:

| | | | |
|-----------|--------|------|------|
| 0 - 2536' | 2 3/8" | 4.7# | J-55 |
|-----------|--------|------|------|

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 @ 1052'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1052'. 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.

January 4, 2006

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 141 sx (300 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 424 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.

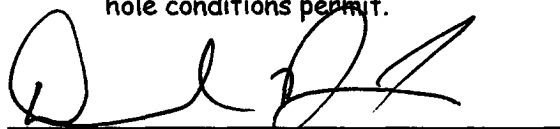
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

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:

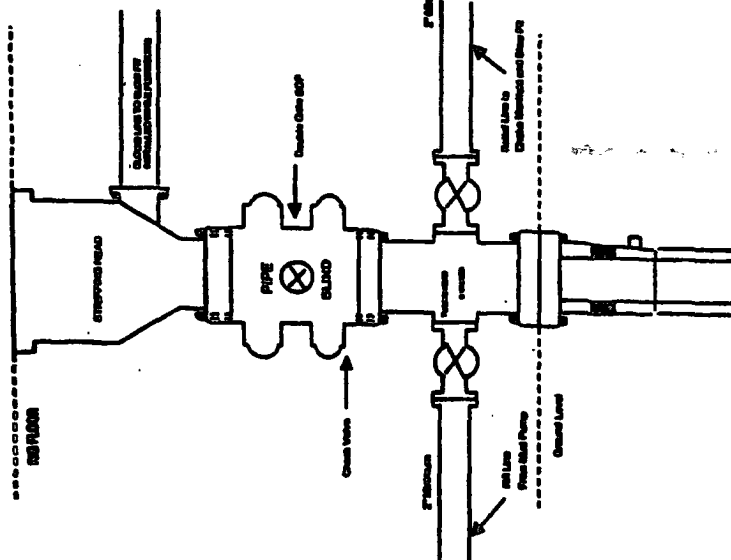
- * The Fruitland Coal, and Pictured formations will be completed.
- * Anticipated pore pressure for the Fruitland Coal is 600 - 700 psi.
- * This gas is dedicated.
- * The east half of the section is dedicated to the FC, and the SESE/4 of the section is dedicated to the PC for this well.
- * New casing will be utilized.
- * Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.


Drilling Engineer

115106
Date

BURLINGTON RESOURCES

Completion/Workover Rig BOP Configuration 2,000 psi System

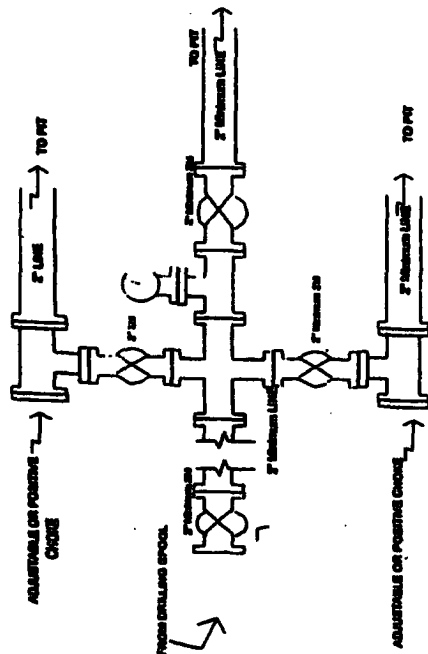


Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind end pipe rams. A striking head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi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

Figure #2

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 2000 psi System

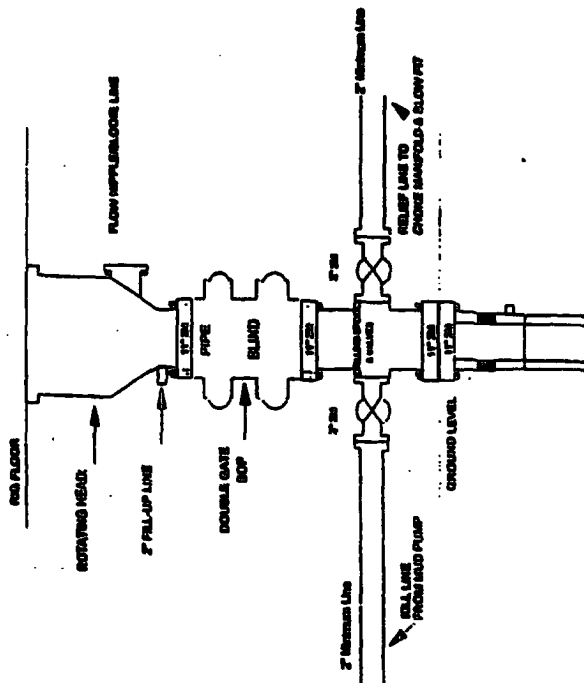


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

Burlington Resources

Drilling Rig 2000 psi System



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

Figure #1