

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RCVD DEC 28 '01  
OIL CONS. DIV.  
DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2006 NOV 22 PM 3 21 RECEIVED OTO FARMINGTON	5. Lease Number SF-078040-A Unit Reporting Number
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON</b> 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 Childers 9. Well Number #100
4. Location of Well Unit O (SWSE), 860' FSL & 1980' FEL,  Lat. 36°92249'N Long. 107°93888'W		10. Field, Pool, Wildcat Basin Fruitland Coal  11. Sec., Twn, Rge, Mer. (NMPM) 0 Sec. 1, T31N, R11W  API # 30-045-34078
14. Distance in Miles from Nearest Town Aztec 9 miles	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 860'		
16. Acres in Lease	17. Acres Assigned to Well S/2 315.13 320	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 54' MV/DK		
19. Proposed Depth 3068'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6113' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Richard Thompson</u> Regulatory Technician	Date: <u>11/9/06</u>	

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE APM

DATE 12/27/06

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.

This action is subject to technical and procedural review pursuant to 43 CFR 3160.3 and appeal pursuant to 43 CFR 3160.4

NMOCD

12/28/06

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

DISTRICT II  
211 South First, Santa Fe, NM 87501

DISTRICT III  
1500 Rio Bravos Rd., Santa Fe, NM 87505

DISTRICT IV  
3040 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

RCVD DEC28'06  
OIL CONS. DIV.  
DIST. 3

API Number 30-045- <b>34078</b>	Pool Code 71629	Pool Name FRUITLAND COAL
Property Code <del>71629</del> <b>18490</b>	Property Name CHILDERS	Well Number 100
OGRIID No. 14538	Operator Name BURLINGTON RESOURCES O&G CO LP	Elevation 6113'

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	1	31N	11W		260'	SOUTH	1980'	EAST	SAN JUAN

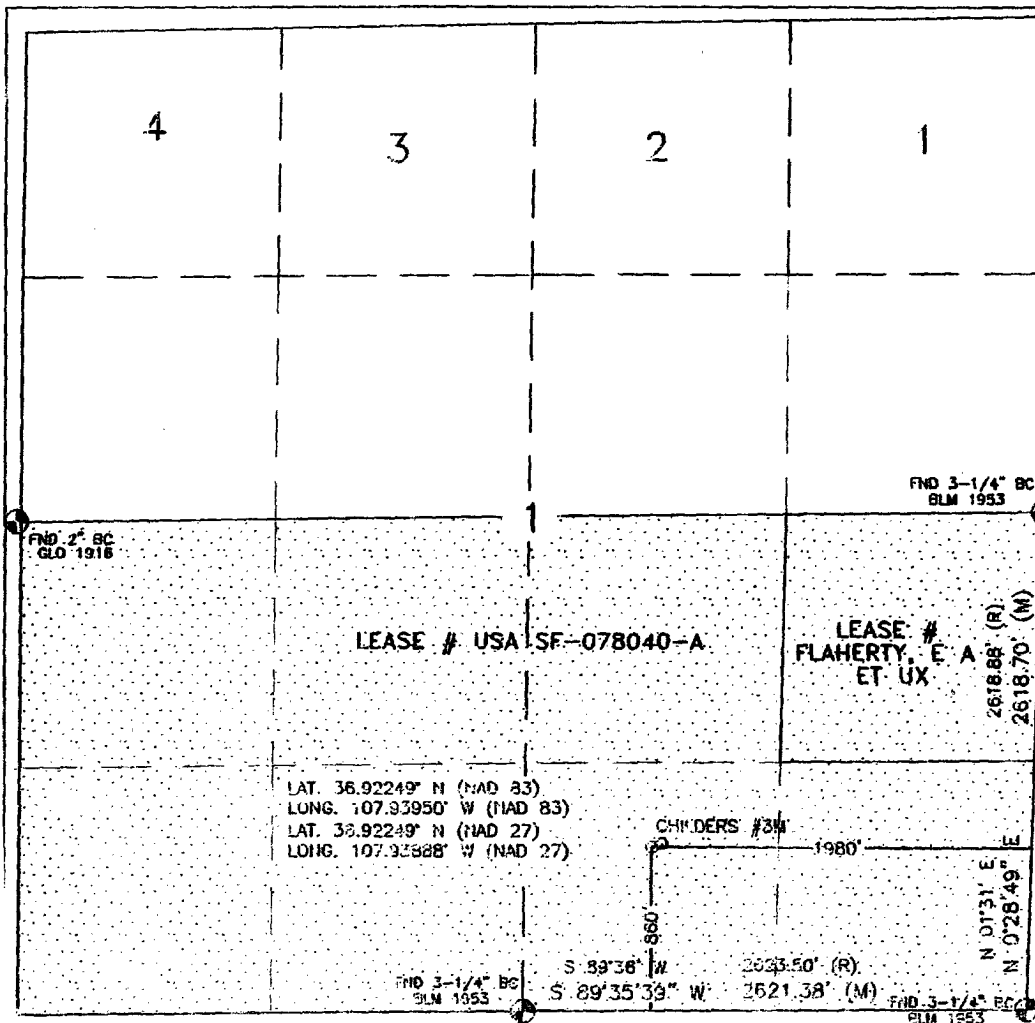
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0									

Dedicated Acres <b>320</b> 315.13 Acres - (S/2)	Joint or Infill	Consolidation Code	Order No.
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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

18



17 OPERATOR CERTIFICATION

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

*Philana Thompson*  
Signature

Philana Thompson  
Printed Name  
Regulatory Technician  
Title

October 24 2006  
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.

OCTOBER 12, 2006

Date of Survey

Signature and Seal of Professional Surveyor:

*David Russell*

DAVID RUSSELL

Certificate Number 10201

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-

34078

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil &amp; Gas Lease No.

SF-078040-A

7. Lease Name or Unit Agreement Name

Childers

8. Well Number

#100

9. OGRID Number

14538

10. Pool name or Wildcat

Basin Fruitland Coal

## 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 &amp; GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter

O

:

860

feet from the

South

line and

1980

feet from the

East

line

Section

I

Township

31N

Rng

11W

NMPM

County

San Juan

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

6113' GR

Pit or Below-grade Tank Application

or Closure ☐

Pit type

New Drill

Depth to Groundwater

&gt;100

Distance from nearest fresh water well

&gt;1000

Distance from nearest surface water

&gt;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 ☐

OTHER:

New Drill Pit

☒

## SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐COMMENCE DRILLING OPNS. ☐CASING/CEMENT JOB ☐ALTERING CASING ☐P AND A ☐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, Unlined:

Burlington Resources proposes to construct a new drilling pit, an associated vent/flare pit and a pre-set mud pit (if required). Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit, vent/flare pit and pre-set mud pit will be unlined pits 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 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 Philana Thompson TITLE Regulatory Technician DATE 11/1/2006

Type or print name

Philana Thompson

E-mail address:

thompson@conocophillips.com

Telephone No.

505-326-9700

For State Use Only

APPROVED BY [Signature]

TITLE

DEPUTY OIL &amp; GAS INSPECTOR, DIST. 4

DATE

DEC 28 2006

Conditions of Approval (if any):

**BURLINGTON RESOURCES O&G CO LP**

# CHILDERS #100

**860' FSL & 1980' FEL**

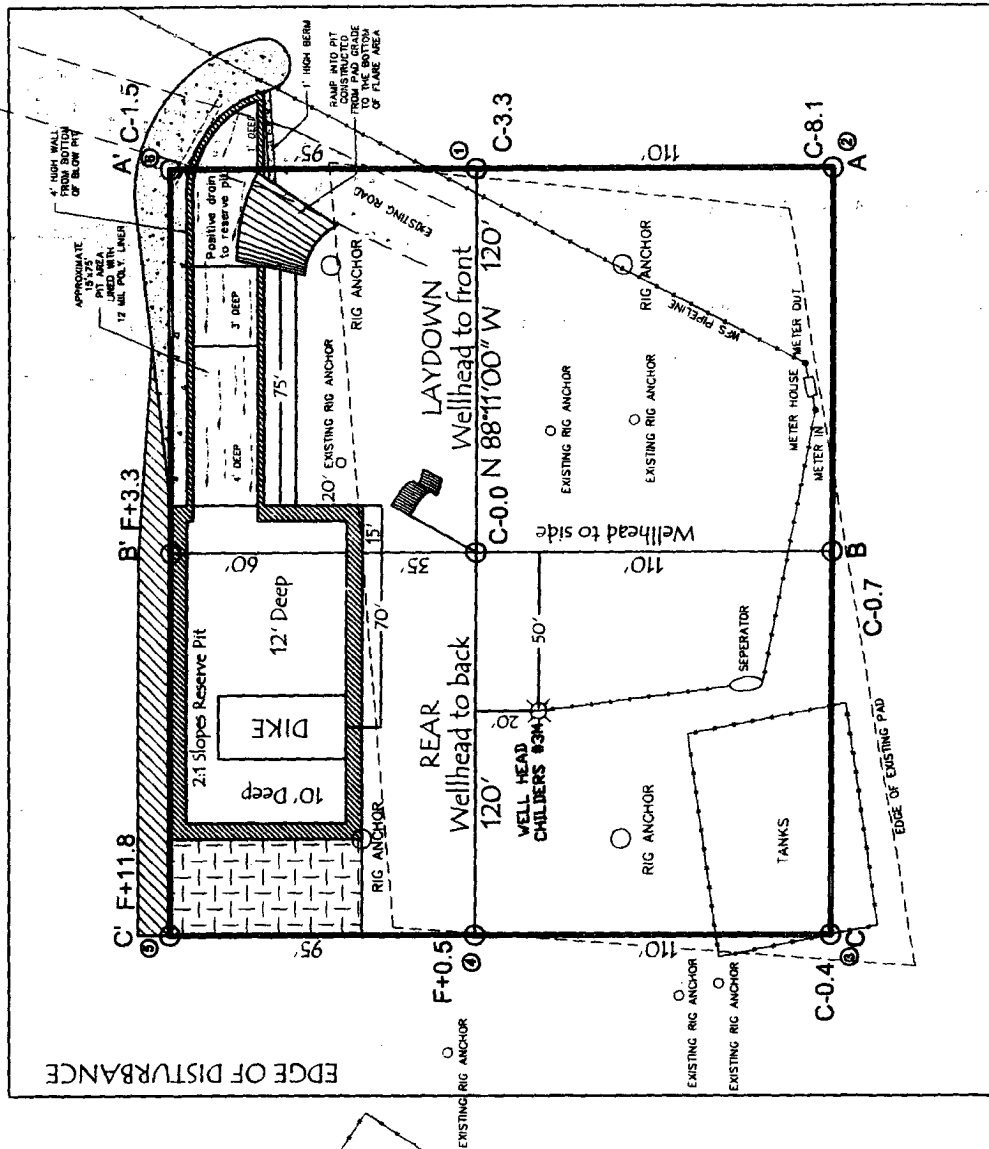
LOCATED IN THE SW/4 SE/4 OF SECTION 1,

T31N, R11W, N.M.P.M.,

**SAN JUAN COUNTY, NEW MEXICO**

GROUND ELEVATION: 6113', NAVD 88

FINISHED PAD ELEVATION: 6113.0'; NAVD 88



5' x 340' = 2.38 ACRES OF DISTURBANCE  
SCALE: 1" = 60'  
JOB No.: COP047  
DATE: 10/18/06

NOTE: RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE). RUSSELL SURVEYING, INC. 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, IN CONSTRUCTION ZONE AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

**Russell Surveying**  
1409 W. Aztec Blvd. #5  
Aztec, New Mexico 87410  
(505) 334-8637

LATITUDE: 36.92249°N  
LONGITUDE: 107.93950°W  
DATUM: NAD 83

# BURLINGTON RESOURCES O&G CO LP

CHILDERS #100

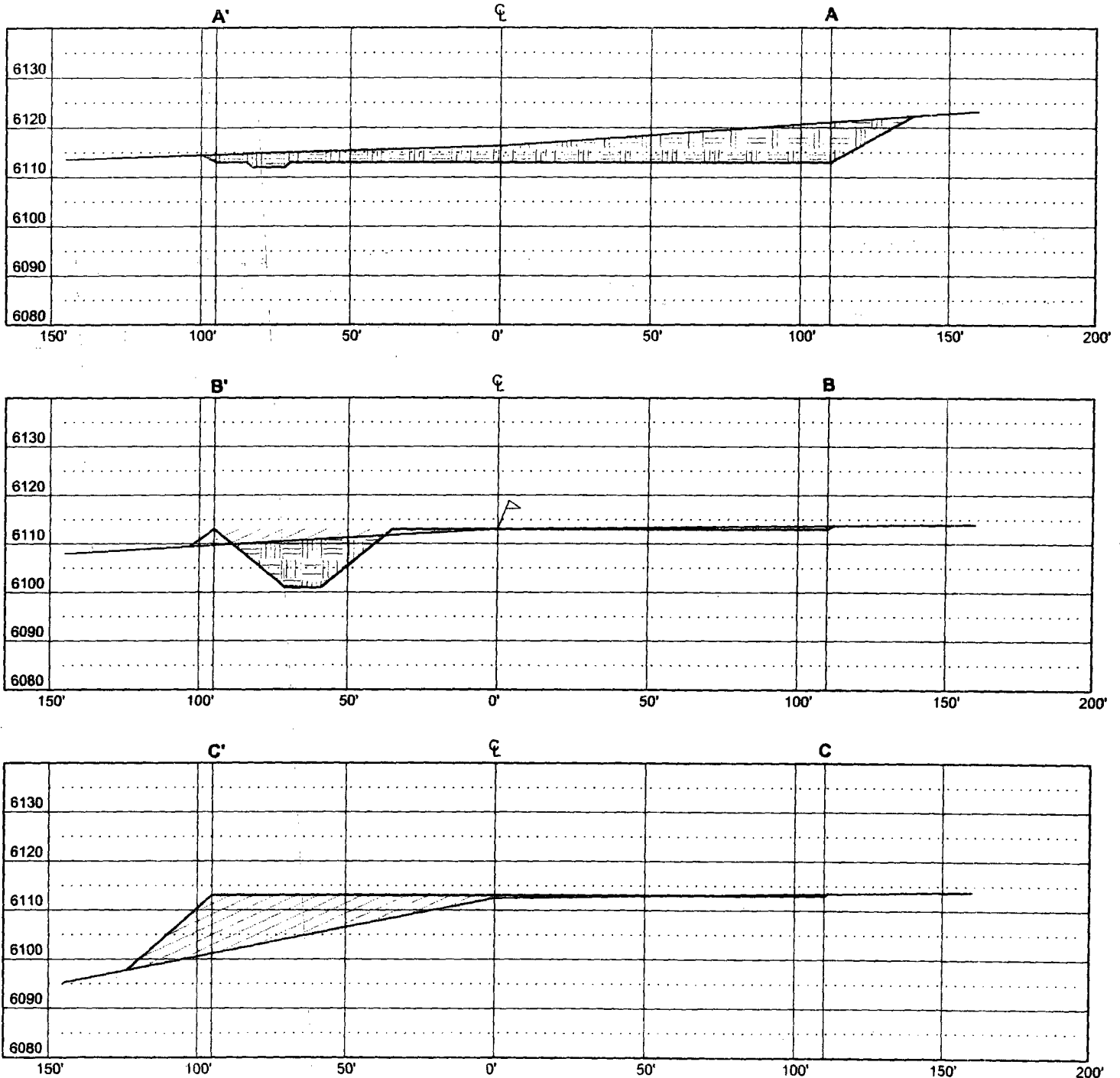
360' FSL & 1980' FEL

LOCATED IN THE SW/4 SE/4 OF SECTION 1,  
T31N, R11W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

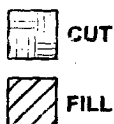
GROUND ELEVATION: 6113', NAVD 88

FINISHED PAD ELEVATION: 6113.0', NAVD 88



THIS DIAGRAM IS AN ESTIMATE OF DIRT BALANCE AND IS NOT INTENDED TO BE AN EXACT MEASURE OF VOLUME

HORIZONTAL SCALE: 1" = 30'  
VERTICAL SCALE: 1" = 50'  
JOB No.: COP047  
DATE: 10/18/06



**Russell Surveying**  
1409 W. Aztec Blvd. #5  
Aztec, New Mexico 87410  
(505) 334-8637

OPERATIONS PLAN

**Well Name:** Childers #100  
**Location:** Unit O (SWSE), 860' FSL & 1980' FEL, Sec. 1, T31N, R11W  
 San Juan County, New Mexico  
 Latitude 36° 92249'N Longitude 107° 93888' W  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6113' GR

Formation:	Top	Bottom	Contents
San Jose	surface		
Ojo Alamo	1100'		aquifer
Kirtland	1260'		gas
T/Fruitland	2591'		gas
Pictured Cliffs	2868'		
Total Depth	3068'		

**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
120-3068'	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 - 3068'	4 1/2"	10.5#	J/K-55

**Tubing Program:**

0 - 3068'	2 3/8"	4.7#	J-55
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**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 @ 1100'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1100'. 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.

November 7, 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 163 sx (348 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 472 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.

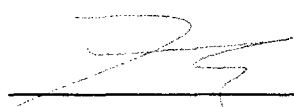
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

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 formation will be completed.
- \* Anticipated pore pressure for the Fruitland Coal is 600 - 700 psi.
- \* This gas is dedicated.
- \* The S/2 of the section is dedicated to the FC for this well.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

  
\_\_\_\_\_  
Drilling Engineer

9 Nov 2006  
Date

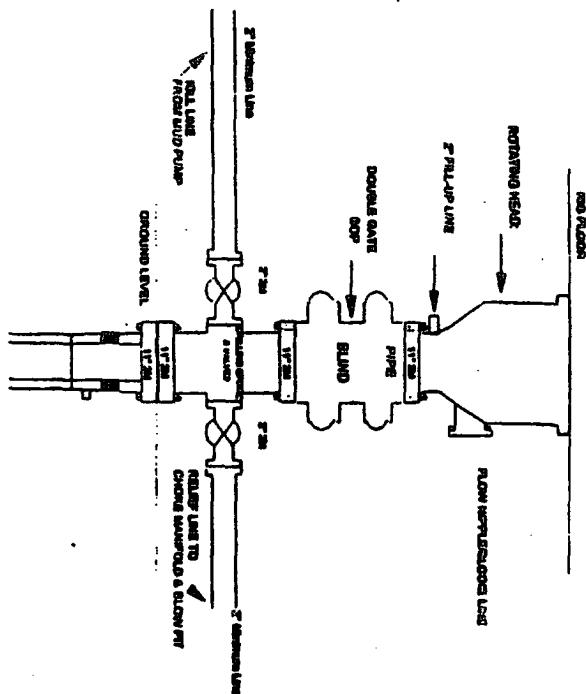


Blowout preventor equipment (BOPE) tests must be performed using an appropriately sized test plug. The BOPE test must be performed and recorded using a test pump, calibrated test gauges and a properly calibrated strip or chart recorder. The test must be recorded in the driller's log and will include 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 authorized in the Application for Permit to Drill (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 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 the BOPE will be exposed. Casing pressure tests must be held for 30 minutes with no more than a 10 percent pressure drop during the duration of the test.



# Burlington Resources

## Drilling Rig 2000 psi System



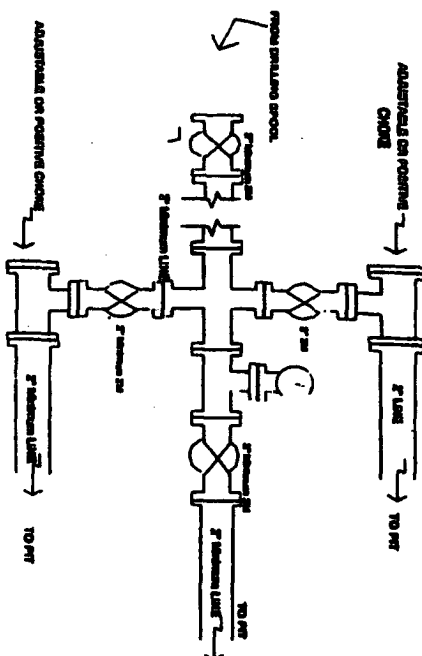
BCP installation from Surface Casing Feet to Total Depth, 17\"/>

Figure #1

4-20-01

# BURLINGTON RESOURCES

## Drilling Rig Choke Manifold Configuration 2000 psi System



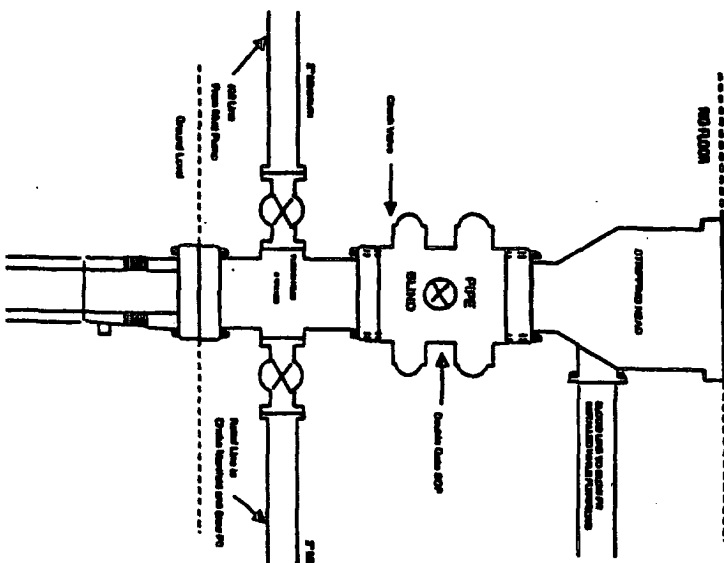
Choke manifold installation from Surface Casing Feet to Total Depth, 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

# BURLINGTON RESOURCES

## Completion/Workover Rig BCP Configuration 2,000 psi System



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

Figure #2

4-20-01