

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2007 FEB -5 PM 3:47

1a. Type of Work DRILL	5. Lease Number NMSF-078424 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 San Juan 29-7 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number #586	
4. Location of Well Unit H (SENE), 1425' FNL & 545' FEL,  Latitude 36° 42.0077 N Longitude 107° 33.0330 W	10. Field, Pool, Wildcat Basin FC/Blanco PC  11. Sec., Twn, Rge, Mer. (NMPM) H Sec. 27, T29N, R7W  API # 30-039- 30194	
14. Distance in Miles from Nearest Town 20.5 miles/Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 545'	17. Acres Assigned to Well FC/PC - 320 - (E/2)	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease	
19. Proposed Depth 3373'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6368' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached	RCVD AUG 2'07 OIL CONS. DIV. DIST. 3	
24. Authorized by: <u>Rhonda Rogers</u> Rhonda Rogers (Regulatory Technician)	1-9-07 Date	

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.

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

NMOCD

08-03-07

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

HOLD 0104 FOR NSL for Blanco PC

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

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 83240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 8210

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

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PM 3:47

1220 South St. Francis Dr.  
Santa Fe, NM 87505

RECEIVED

BLM

NSL 210 FARMINGTON NM

Form C-102

Revised June 10, 2002

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-30194		*Pool Code 71629/72359	*Pool Name Basin Fruitland Coal/Blanco Pictured Cliff
*Property Code 7465	*Property Name SAN JUAN 29-7 UNIT		*Well Number 586
*OGRM No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		*Elevation 6368'


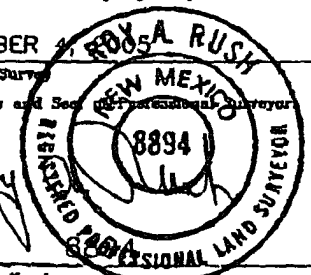
## 10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	27	29-N	7-W		1425	NORTH	545	EAST	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
*Dedicated Acres 320 FC 160 PC		*Joint or Infill		*Consolidation Code		*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	FD. 2 1/2" BC 1913 G.L.O.	S 89-57-52 W 2643.04' (M)	FD. 2 1/2" BC 1913 G.L.O.	17	<b>OPERATOR CERTIFICATION</b>	
	NMSF-078424 (FRT/PC)				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Rhonda Rogers Printed Name Regulatory Technician Title 12/8/06 Date	
LAT. 36°42.0077' N. (NAD 27) LONG. 107°33.0330 W. (NAD 27)				<b>18 SURVEYOR CERTIFICATION</b> 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.		
27		NMSF-078945 (FRT/PC)	N 00-11-31 W 5278.95' (C)	OCTOBER 4, 2005 Date of Survey Signature and Seal of Professional Land Surveyor  Certificate Number		
Lopez, J. I. et ux (FRT/PC)				CALC'D. BY DBL PROP.		

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

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.)		WELL API NO. 30-039- <b>30194</b>
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator BURLINGTON RESOURCES OIL & GAS COMPANY LP		6. State Oil & Gas Lease No. NMSF-078945
3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402		7. Lease Name or Unit Agreement Name San Juan 29-7 Unit
4. Well Location Unit Letter <u>H</u> : <u>1425'</u> feet from the <u>North</u> line and <u>545'</u> feet from the <u>East</u> line Section <u>15</u> Township <u>29N</u> Rng <u>7W</u> NMPM County <u>Rio Arriba</u>		8. Well Number #586
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6368		9. OGRID Number 14538
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Blanco PC/Basin FC
Pit type <u>New Drill</u> Depth to Groundwater <u>&lt;50</u> Distance from nearest fresh water well <u>&gt;1000'</u> Distance from nearest surface water <u>&lt;200</u>		
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>        </u> bbls; Construction Material <u>        </u>		

## 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 NMOCDC 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 NMOCDC office.

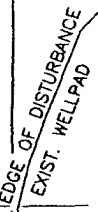
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCDC guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Rhonda Rogers TITLE Regulatory Technician DATE 12-11-06Type or print name Rhonda Rogers E-mail address: rogerrs@conocophillips Telephone No. 505-599-4018

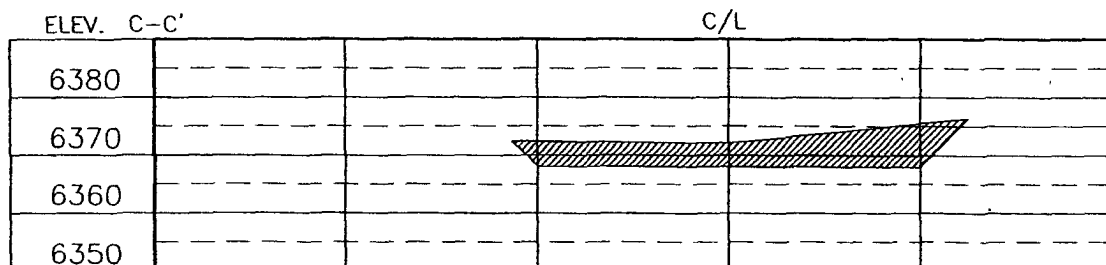
For State Use Only

Deputy Oil & Gas Inspector,  
District #3APPROVED BY [Signature] TITLE Deputy Oil & Gas Inspector, District #3 DATE AUG 03 2007Conditions of Approval (if any): Close pits per vulnerable area rules.

Slit  
Trap  
EDGE WASH




NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



REVISION:	DATE:	REMOVED BY:
WELL RESTAKE	10/18/05	B. LEIDY



**Daggett Enterprises, Inc.**  
 Surveying and Oil Field Services  
 P. O. Box 15068 • Farmington, NM 87401  
 Phone (505) 326-1772 • Fax (505) 326-6019

DRAWN BY: G.V.	CARTLE BR550_CFB
WORK: BR550	DATE: 9/02/05

NEW MEXICO U.S. No. 8894

## OPERATIONS PLAN

Well Name: SAN JUAN 29-7 UNIT 586  
Location: 1425' FNL & 545' FEL  
Rio Arriba County, New Mexico  
Formation: Basin Fruitland Coal/Blanco Pictured Cliff  
Elevation: 6368'

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2285	
Ojo Alamo	2285'	2382'	aquifer
Kirtland	2382'	2940'	gas
Fruitland Coal	2940'	3173'	gas
Pictured Cliffs	3173'	3373'	gas
Total Depth:	3373'		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:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0 - 120'	Spud MUD/Air/Air Mist	8.4 - 9.0	40 - 50	no control
120- 3373'	LSND	8.4 - 9.0	30 - 60	no control

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

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csq. Size</u>	<u>Wt.</u>	<u>Grade</u>
8-3/4"	0' - 120'	7"	20#	J-55
6-1/4"	0' - 3373'	4-1/2"	10.5#	J-55

### Tubing Program:

<u>Depth Interval</u>	<u>Csq. Size</u>	<u>Wt.</u>	<u>Grade</u>
0' - 3373'	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, rams and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -

11" 2000 psi

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 -

7" x 4 1/2" 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:

7"

**Pre-Set Drilled** - Cement with 23 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (38 cu ft of slurry, 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 42 sx Type III cement with 0.25 pps Celloflake, 2% CaCl. (54 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.

4-1/2" Production casing -

Lead with 185 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.

## 4-1/2" production casing alternative two stage -

Stage collar set 300' above the top of the Fruitland. First stage: w/90 sxs Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: 185 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (395 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 @ 2382'. Two turbolating centralizers at the base of the Ojo Alamo @ 2382'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Additional Information:

- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

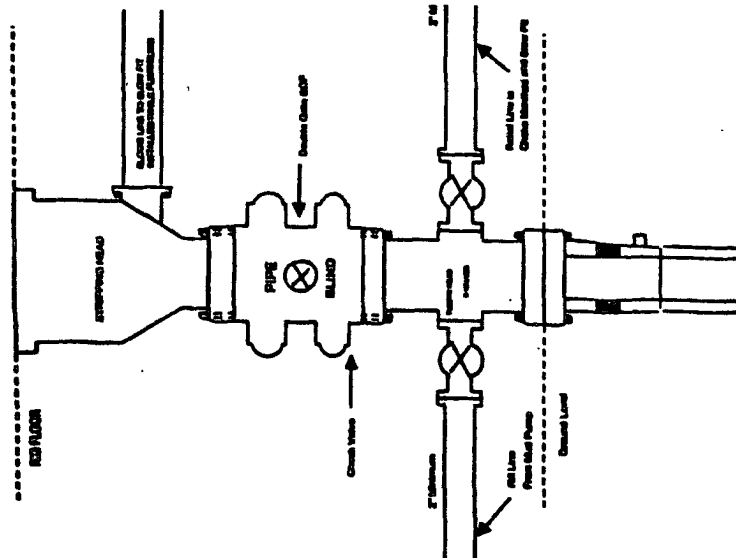
Fruitland Coal	300 psi
Pictured Cliffs	600 psi
- This gas is dedicated.

82 D/R  
Drilling Engineer

12/19/06  
Date

# BURLINGTON RESOURCES

Completion/Workover Rig  
BOP Configuration  
2,000 psi System



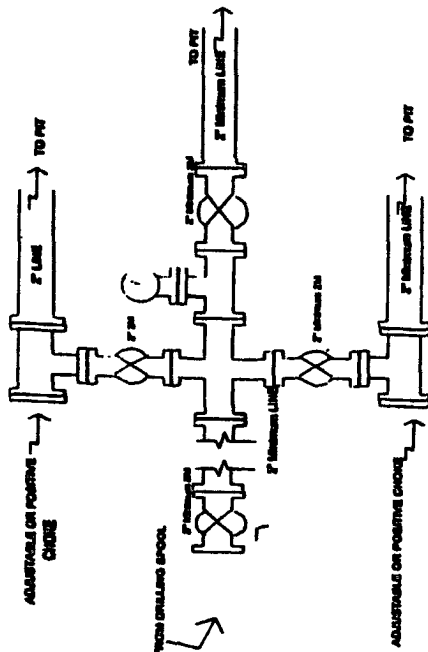
Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 600 psi stripping head.

Figure #2

4-20-01

# BURLINGTON RESOURCES

Drilling Rig  
Choke Manifold Configuration  
2000 psi System



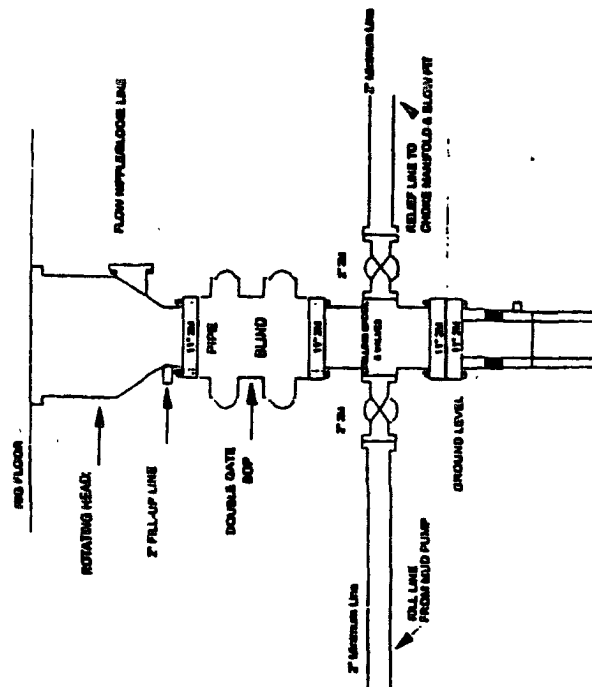
Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two choices.

Figure #3

4-20-01

# 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 preventer. All BOP equipment is 2,000 psi working pressure.

Figure #1