

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2005 JUL 25 PM 3 31  
RECEIVED  
070 FARMINGTON NM

1a. Type of Work DRILL	5. Lease Number NMSF-079050 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON</b> RESOURCES Oil & Gas Company	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 28-6 Unit 9. Well Number #475S
4. Location of Well Unit P (SESE), 1135' FSL & 1195' FEL,  Latitude 36° 37.6892'N Longitude 107° 29.0953'W	10. Field, Pool, Wildcat Basin Fruitland Coal  11. Sec., Twn, Rge, Mer. (NMPM) Sec. 29, T28N, R6W  API # 30-039-29603
14. Distance in Miles from Nearest Town 31.4 miles	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1135	
16. Acres in Lease	17. Acres Assigned to Well 320 acres E/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 58' - SJ 28-6 Unit#147M	
19. Proposed Depth 3481'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6517' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Patsy Clughr</u> Sr. Regulatory Specialist	Date <u>7/25/05</u>

PERMIT NO.

APPROVAL DATE

APPROVED BY [Signature]

TITLE Acting Field  
Field Manager - Minerals

DATE 8/23/05

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 3165.3 and appeal pursuant to 43 CFR 3165.4

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

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

2005 JUL 25 PM 3:21 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039- 29603	2 Pool Code 71629	3 Well Name Basin Fruitland Coal
4 Property Code 7462	5 Property Name SAN JUAN 28-6 UNIT	
6 GRID No. 14538	7 Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	
		8 Well Number 475S
		9 Elevation 6517'

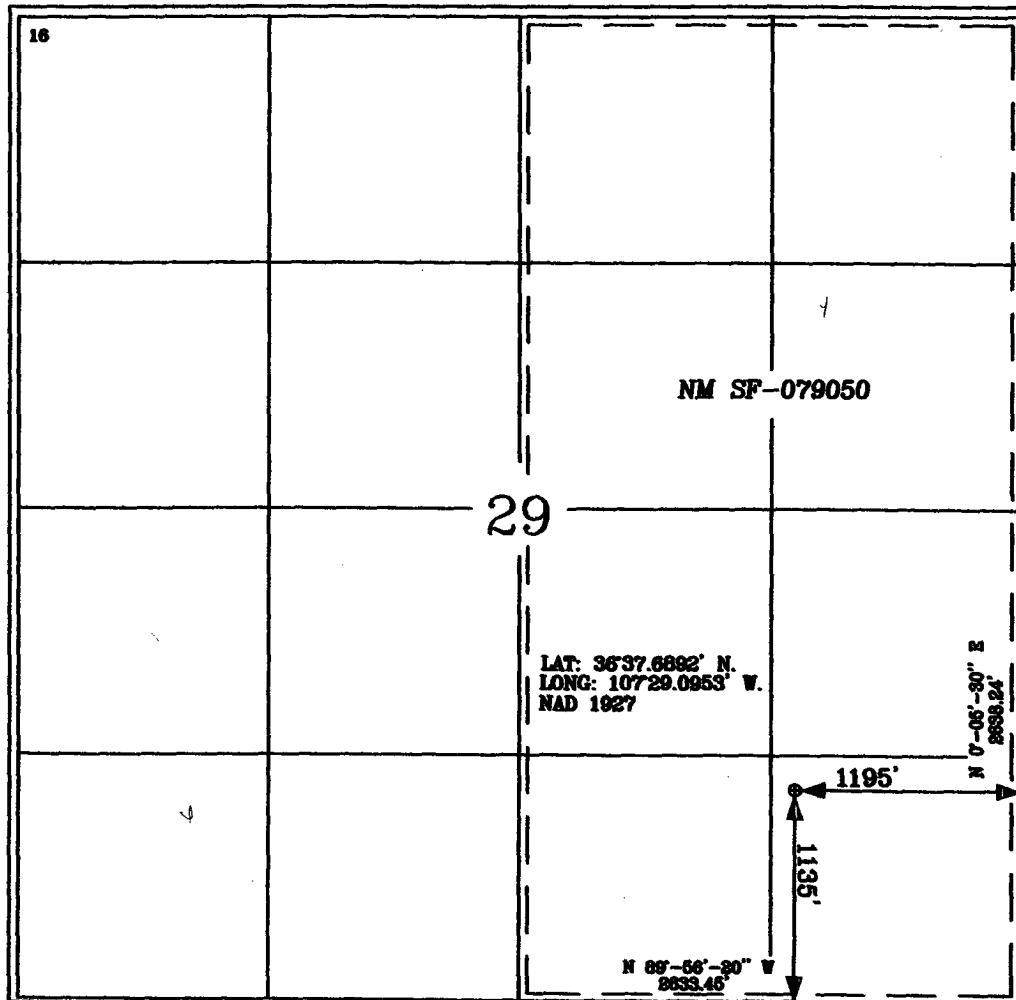
10 Surface Location

UL or lot no. P	Section 29	Township 28-N	Range 6-W	Lot Idn	Feet from the 1135'	North/South line SOUTH	Feet from the 1195'	East/West line EAST	County RIO ARriba
--------------------	---------------	------------------	--------------	---------	------------------------	---------------------------	------------------------	------------------------	----------------------

11 Bottom Hole Location If Different From Surface

UL or lot no. P	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 320 E/2		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



17 OPERATOR CERTIFICATION

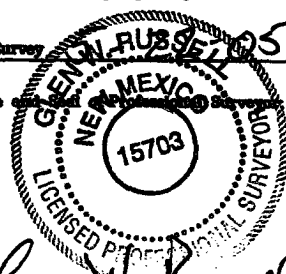
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Patsy Clugston*  
Signature  
Patsy Clugston  
Printed Name  
Sr. Regulatory Specialist  
Title  
5-24-05  
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 of Survey  
5-24-05  
Signature  
Glen Russell  
Certificate Number  
15703



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

Energy, Minerals and Natural Resources

**OIL CONSERVATION DIVISION**

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

**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 P : 1135 feet from the South line and 1195' feet from the East line  
 Section 29 Township 28N Range 6W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
 6517' GL

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: 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:**

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: New Drill Pit ☒

**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, 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 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 Patsy Clugston TITLE Sr. Regulatory Specialist DATE 6/10/2005

Type or print name Patsy Clugston E-mail address: pclugston@br-inc.com Telephone No. 505-326-9518  
**For State Use Only**

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 4 DATE AUG 22 2005  
 Conditions of Approval (if any):

GROUND ELEVATION: 6517' DATE: MAY 3, 2005

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.



LATITUDE: 36° 57.6892' N LONGITUDE: 107° 29.0953' W NAD27



OPERATIONS PLAN

**Well Name:** San Juan 28-6 Unit #475S  
**Location:** Unit P (SESE), 1135' FSL & 1195' FWL, Section 29, T28N, R6W  
 Rio Arriba County, New Mexico  
 Latitude 36° 37.6892'; Longitude 107° 29.0953'W  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6517' GR

Formation:	Top	Bottom	Contents
Ojo Alamo	2551'	2606'	aquifer
Kirtland	2606'	3055'	gas
T/Fruitland	3055'		gas
B/Fruitland Coal	3278'		gas
Pictured Cliffs	3281'		
<b>Total Depth</b>	<b>3481'</b>		

**Note:** The Total Depth for this well is into the Pictured Cliffs interval, but currently only have plans to complete the Fruitland Coal interval. We could in the near future perforate/stimulate the Pictured Cliffs interval, but only would once Regulatory approval was asked for and received.

**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
120-3481'	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 3/4"	0 - 120'	7"	20.0#	J-55
6 1/4"	0 - 3481'	4 1/2"	10.5#	J/K-55

**Tubing Program:**

0 - 3481'	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 @ 2606'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2606'. 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.

San Juan 28-6 Unit #475S

**Cementing:**

7" surface casing Pre-Set Drilled - Cement with Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 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 34 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. <sup>441</sup>54 cu ft of slurry @ ~~1.61~~<sup>1.28</sup> 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 193 sx (411 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 535 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~~<sup>BOP</sup> to 600 psi/30 min.

Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test ~~rams~~<sup>BOP</sup> 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 is between 600 - 700 psi.
- \* This gas is dedicated.
- \* The east half of the section is dedicated to this well.
- \* New casing will be utilized.
- \* Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

  
Drilling Engineer

6/12/05  
Date

