

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

11

1a. Type of Work
DRILL

1b. Type of Well
GAS

2. Operator
**BURLINGTON
RESOURCES** Oil & Gas Company

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499
(505) 326-9700

4. Location of Well
~~2505~~ FSL, ~~885~~ FEL
2436 **770**
Latitude 36° 35.3 Longitude 107° 19.3

5. Lease Number
NMSF-079491
Unit Reporting Number
MV-891000950A
DK-891000950

6. If Indian, All. or Tribe

7. Unit Agreement Name
San Juan 27-5 Unit

8. Farm or Lease Name
San Juan 27-5 Unit

9. Well Number
105N

10. Field, Pool, Wildcat
Blanco MV/Basin DK

11. Sec., Twn, Rge, Mer. (NMPM)
I Sec. 11, T-27-N, R-5-W
API # 30-039- **27276**

12. County
Rio Arriba

13. State
NM

14. Distance in Miles from Nearest Town
38.7 miles from Blanco

15. Distance from Proposed Location to Nearest Property or Lease Line
885'

16. Acres in Lease

17. Acres Assigned to Well
MV - 320 E/2
DK - 320 S/2

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease
1625'

19. Proposed Depth
8742'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
~~7457~~ GR
7451

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: *[Signature]*
Regulatory/Compliance Supervisor

12-11-02
Date

PERMIT NO.

APPROVAL DATE

APPROVED BY **/s/ David J. Markiewicz**

TITLE

DATE JAN 20 2004

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

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 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

RECEIVED

2003 JAN 2 PM 1:11
070 Farmington, NM

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-	² Pool Code 72319/71599	³ Pool Name Blanco Mesaverde/Basin Dakota
⁴ Property Code 7454	⁵ Property Name SAN JUAN 27-5 UNIT	⁶ Well Number 105N
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP	⁹ Elevation 7451'



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
1	11	27-N	5-W		2435	SOUTH	770	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
¹² Dedicated Acres MV-E/320 DK-S/320			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

<p>RECEIVED JAN 19 PM 1:29 Burlington, NM</p> <p>Reissued to show amended location</p>		<p>JAN 2004 USA SF-079491 OIL CONSERVATION DIVISION</p>		<p>FD 3 1/4" BLM BC. 1957</p>		<p>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Peggy Cole Printed Name Regulatory Supervisor Title 8-18-03 Date</p>	
<p>USA SF-079491</p>		<p>11</p> <p>LAT. 36°35.2735' N (NAD 27) LONG. 107°19.2215' W. (NAD 27)</p> <p>USA SF-079491</p>		<p>770'</p> <p>2435'</p> <p>N 01-40-10 E 2628.12' (M)</p> <p>FD 3 1/4" BLM BC. 1957</p>		<p>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 knowledge.  Date of Survey 15703 Signature and Seal of Professional Surveyor 15703 Certificate Number</p>	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

RECEIVED

1. Type of Well
GAS

2003 AUG 19 PM 1:28

070 Farmington, NM

2. Name of Operator

BURLINGTON

RESOURCES OIL & GAS COMPANY LP

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

2435'FSL, 770'FEL, Sec.11, T-27-N, R-5-W, NMPM

5. Lease Number
NMSF-0794916. If Indian, All. or
Tribe Name

7. Unit Agreement Name

San Juan 27-5 Unit
8. Well Name & Number
San Juan 27-5 U #105N
9. API Well No.
30-039- 27274
10. Field and Pool
Blanco MV/Basin DK
11. County and State
Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

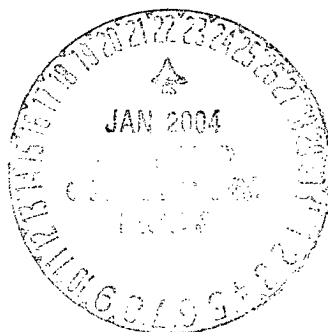
Type of Submission

Type of Action

☒ Notice of Intent☐ Abandonment☒ Change of Plans☐ Subsequent Report☐ Recompletion☐ New Construction☐ Final Abandonment☐ Plugging Back☐ Non-Routine Fracturing☐ Casing Repair☐ Water Shut off☐ Altering Casing☐ Conversion to Injection☒ Other -

13. Describe Proposed or Completed Operations

The location for the subject well has been moved from 2505'FSL, 885'FEL to 2435'FSL, 770'FEL at the request of the Bureau of Land Management. Attached are a new C-102 plat, Multi-point use plan, topographic map, and cut and fill diagram.



14. I hereby certify that the foregoing is true and correct.

Signed Reggie Cole Title Regulatory Supervisor Date 8/18/03
no

(This space for Federal or State Office use)

APPROVED BY David J. Mankiewicz Title _____ Date JAN 20 2004

CONDITION OF APPROVAL, if any:

NMOCD

OPERATIONS PLAN

Well Name: San Juan 27-5 Unit #105N
2505' FSL, 885' FEL, Section 11, T-27-N, R-5-W
Rio Arriba County, New Mexico
Latitude 36° 35.3, Longitude 107° 19.3
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7457' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3684'	
Ojo Alamo	3684'	3854'	aquifer
Kirtland	3854'	4089'	gas
Fruitland	4089'	4309'	
Pictured Cliffs	4309'	4399'	gas
Lewis	4399'	4884'	gas
Intermediate TD	4499'		
Huerfano Bentonite	4884'	5264'	gas
Chacra	5264'	6064'	gas
Cliff House	6064'	6119'	
Menefee	6119'	6469'	gas
Point Lookout	6469'	6979'	gas
Mancos	6979'	7639'	gas
Gallup	7639'	8407'	gas
Greenhorn	8407'	8467'	gas
Graneros	8467'	8502'	gas
Dakota	8502'		gas
TD	8742'		

Logging Program:

Mud logs - none
Cased hole - CBL-CCL-GR - TD to surface
Open hole - none
Cores - none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud	8.4-9.0	40-50	no control
120- 4499'	LSND	8.4-9.0	30-60	no control
4499- 8742'	Air/N2	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

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

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 120'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 4499'	7"	20.0#	J-55
6 1/4"	4399' - 8742'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 8742'

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 3000 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" 3000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

2" nominal, 3000 psi minimum choke manifold (Reference Figure #2).

Completion Operations -

7 1/16" 3000 psi double gate BOP stack (Reference Figure #3). 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 2 3/8" x 3000 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 drilling crew.
- All BOP tests and 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 - cement with 80 sx Type III cement with 0.25 pps Celloflake and 2% calcium chloride (113 cu.ft. of slurry, 200% excess to circulate to surface). WOC 24 hours for pre-set holes or 8 hours for conventionally set holes before pressure testing or drilling out from under surface casing. 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 w/418 sx Premium Lite cement with 3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS. Tail w/90 sx Type III cmt w/1% calcium chloride, 0.25 pps Flocele, 0.2% fluid loss (1014 cu.ft. of slurry, 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 during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar 3989'. First stage: cement with 54 sx Type III cmt w/1% calcium chloride, 0.25 pps Flocele, 0.2% fluid loss. Second stage: 422 sx Premium Lite cmt with 3% calcium chloride, 0.25 pps Flocele, 5 ps LCM-1, 0.4% fluid loss, 0.4% SMS (1014 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 at 3854'. Two turbolating centralizers at the base of the Ojo Alamo at 3854'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 315 sx Premium Lite cmt w/0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss (624 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of float shoe.

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

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

- 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 (Gas/Mist Drilling):

The following equipment will be operational while gas/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.
- Deduster equipment will be utilized.
- 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 Mesaverde 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	2500 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The east half of Section 11 is dedicated to the Mesaverde and the south half of Section 11 is dedicated to the Dakota in this well.
- This gas is dedicated.



Drilling Engineer

12/31/2002

Date