

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 SF-078215 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator BURLINGTON 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 Page 9. Well Number 101R	
4. Location of Well 1550' FSL, 2480' FWL Latitude 36° 58.9', Longitude 107° 55.5'	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) K Sec. 18, T-32-N, R-10-W API # 30-045-31021	
14. Distance in Miles from Nearest Town 14.2 Miles to Int Hwy 550 & Hwy 173 north of Aztec	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1550'	17. Acres Assigned to Well 328.13 5/2	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 558'	
19. Proposed Depth 3096	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6374'	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>[Signature]</u> Regulatory/Compliance Supervisor	Date <u>1-29-02</u>	

PERMIT NO. _____ APPROVAL DATE 4/1/02
APPROVED BY /s/ David J. Mankiewicz TITLE AFM DATE 4/1/02

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.

NMOCU

This action is subject to technical and procedural review pursuant to 43 CFR 160.1 and appeal pursuant to 43 CFR 160.4.

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

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

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994
Instructions on back

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-045	¹ API Number 31021	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 18595	⁵ Property Name PAGE		⁶ Well Number 101R
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL AND GAS INC.		⁹ Elevation 6374'

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
K	18	32-N	10-W		1550'	SOUTH	2480'	WEST	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
¹² Dedicated Acres S/328.13					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			
LOT 8				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief			
LOT 7				Signature <i>Peggy Cole</i>			
LOT 6				Printed Name Peggy Cole			
LOT 5				Title Regulatory Supervisor			
LOT 9				Date 1-29-02			
QTR. CORNER FD 3 1/4" B.C. 1953 BLM				Date			
LOT 10				¹⁸ SURVEYOR CERTIFICATION			
LOT 11				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 and belief			
LOT 12				Date of Survey 12-1-01			
LOT 13				Signature and Seal of Professional Surveyor <i>[Signature]</i> 8894			
LOT 14				Certificate Number			
LOT 15							
LOT 16							
LOT 17							
LOT 18							
LOT 19							
LOT 20							

OPERATIONS PLAN

Well Name: Page #101R
Location: 1550' FSL, 2480' FWL Section 18, T-32-N, R-10-W
Latitude 36° 58.9, Longitude 107° 55.5
San Juan County, NM
Formation: Basin Fruitland Coal
Elevation: 6374' GL

Formation:	Top	Bottom	Contents
Surface	San Jose	1242'	
Ojo Alamo	1242'	1314'	aquifer
Kirtland	1314'	2642'	
Intermediate TD	2640'		
Fruitland	2642'	3092'	gas
B/Basal Coal	3092'	3096'	gas
Total Depth	3096'		

Logging Program: Open hole: Platform express TD-surface.
Cased hole: CBL/GR/CCL
Mudlog: 2 man unit from Ojo Alamo to TD
Coring Program: none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-2640'	Non-dispersed	8.4-9.0	30-60	no control
2640-3096'	Air/Mist			

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

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 2640'	7"	20.0#	K-55
6 1/4"	2600' - 3096'	5 1/2"	15.5#	K-55

Tubing Program:

0' - 3096'	2 3/8"	4.7#	J-55
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Float Equipment: 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill float collar. Three centralizers run every fourth joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1314'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

5 1/2" production casing - Pre-drilled liner run to the 7" casing with an overlap. Liner hanger is a slip grip type.

Wellhead Equipment: 9 5/8" x 7" x 2 3/8" x 11" 3000 psi xmas tree assembly.

Cementing:

9 5/8" surface casing - cement with 159 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi/30 minutes.

7" intermediate casing - lead w/361 sacks Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack flocele, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks Type III cmt with 1% calcium chloride, 1/4#/sack flocele and 0.2% FL-52 (893 cu.ft., 125% excess to circulate to surface).

5 1/2" liner - uncemented.

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

BOP and tests:

Surface to intermediate TD - 11" 2000 psi (minimum) double gate EOP stack (Reference Figure #1). Prior to drilling out surface casing, test rams to 600#/30 min.

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test blind rams and casing to 1500 psi for 30 minutes; all pipe rams and casing to 1500 psi for 30 minutes each.

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 less than 500 psi.
- * This gas is dedicated.
- * The south half of section 18 is dedicated to the Fruitland Coal.

Date: 1/31/02

Drilling Engineer: Em J. Giles