

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number NMSF-078215 Unit Reporting Number Farmington, NM
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 101S
4. Location of Well 980' FSL, 1095' FEL Latitude 36° 58.8401'N, Longitude 107° 55.0307'W	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 18, T-32-N, R-10-W API # 30-045- 32072
14. Distance in Miles from Nearest Town 16.8 miles to Aztec, NM P.O.	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 980'	
16. Acres in Lease	17. Acres Assigned to Well 328.13 S/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 21'	
19. Proposed Depth 3210'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6380' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Tammy Winsatt</u> Regulatory/Compliance Specialist	<u>12-16-03</u> Date

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY /s/ David J. Markiewicz

TITLE _____

DATE JAN 14 2004

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

NMOC

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

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-32072	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 18595	Property Name PAGE	Well Number 101S
OGRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS, INC.	Elevation 6380'

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
P	18	32-N	10-W		980'	SOUTH	1095'	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
Dedicated Acres S/328.13					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

LOT 8	LOT 7	LOT 6	LOT 5
LOT 9	LOT 10	LOT 11	LOT 12
LOT 16	LOT 15	LOT 14	LOT 13
LOT 17	LOT 18	LOT 19	LOT 20

USA SF-078215

LAT. 36°58.8401' N (NAD 27)
LONG. 107°55.0301' W

FD 3 1/4" B.L.M. BC 1969

FD 3 1/4" B.L.M. BC 1969

S 86-41-41 W 2818.23' (M)

304'

1095'

314'

980'

N 01-50-42 W 2568.30' (M)

¹⁷ OPERATOR CERTIFICATION

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

Tammy Wimsatt
Signature
Tammy Wimsatt
Printed Name
Regulatory Specialist
Title
10-17-03
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.

DAVID A. JOHNSON
Date of Survey
Signature and Seal of Professional Surveyor:
14827
REGISTERED PROFESSIONAL SURVEYOR
14827
Certificate Number

OPERATIONS PLAN

Well Name: Page #101S
Location: 980'FSL, 1095'FEL Section 18, T-32-N, R-10-W
Latitude 36° 58.8401'N, Longitude 107° 55.0301'W
San Juan County, NM
Formation: Basin Fruitland Coal
Elevation: 6380'GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1617'	
Ojo Alamo	1617'	1683'	aquifer
Kirtland	1683'	2577'	
Fruitland	2577'	2837'	
Intermediate TD	2817'		
Fruitland Coal	2837'	3125'	gas
B/Basal Coal	3125'	3132'	gas
Pictured Cliffs	3132'		
Total Depth	3210'		

Logging Program: none
Mudlog: from 7" to TD
Coring Program: none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud/Air/Air Mist	8.4-9.0	40-50	no control
120-2817'	Non-dispersed	8.4-9.0	30-60	no control
2817-3210'	Air/Mist			

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#	H-40
8 3/4"	0' - 2817'	7"	20.0#	J-55
6 1/4"	2817' - 3210'	open hole		

Alternate 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#	H-40
8 3/4"	0' - 2817'	7"	20.0#	J-55
6 1/4"	2777' - 3210'	5 1/2"	15.5#	J-55

Tubing Program:

0' - 3210'	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. Standard centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1683'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 9 5/8" x 7" x 2 3/8" x 11" 2000 psi xmas tree assembly.

Cementing:

9 5/8" surface casing -

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. (37 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 80 sx Type III cement with 0.25 pps Celloflake, 2% CaCl. (113 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.

Waive the 6 hours WOC in lieu of 4 hours prior to NU of BOPE.

7" intermediate casing - lead w/252 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 (660 cu.ft., 50% excess to circulate to surface).

5 1/2" liner - will not be cemented if run.

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 BOP 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: 12-15-03

Drilling Engineer: