

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
NMNM01614
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
Thompson

9. Well Number
103

4. Location of Well
800' FSL, 1085' FWL
Latitude 36° 51.0416, Longitude 108° 06.5164

10. Field, Pool, Wildcat
Basin Fruitland Coal

11. Sec., Twn, Rge, Mer. (NMPM)
M Sec. 33, T-31-N, R-12-W
API # 30-045-31574

14. Distance in Miles from Nearest Town
3.6 miles to Flora Vista P.O.

12. County
San Juan

13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line
800'

16. Acres in Lease

17. Acres Assigned to Well
320 W/2

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
21'

19. Proposed Depth
2432'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
5944' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Peggy Case
Regulatory/Compliance Supervisor Date 3-12-03

PERMIT NO. _____

APPROVAL DATE JUN 04 2003

APPROVED BY Original Signed: Stephen Mason

TITLE _____

DATE JUN 04 2003

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.

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

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

NMOCDD

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- 31574		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 18628	*Property Name THOMPSON		*Well Number 103
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS, INC.		*Elevation 5944'

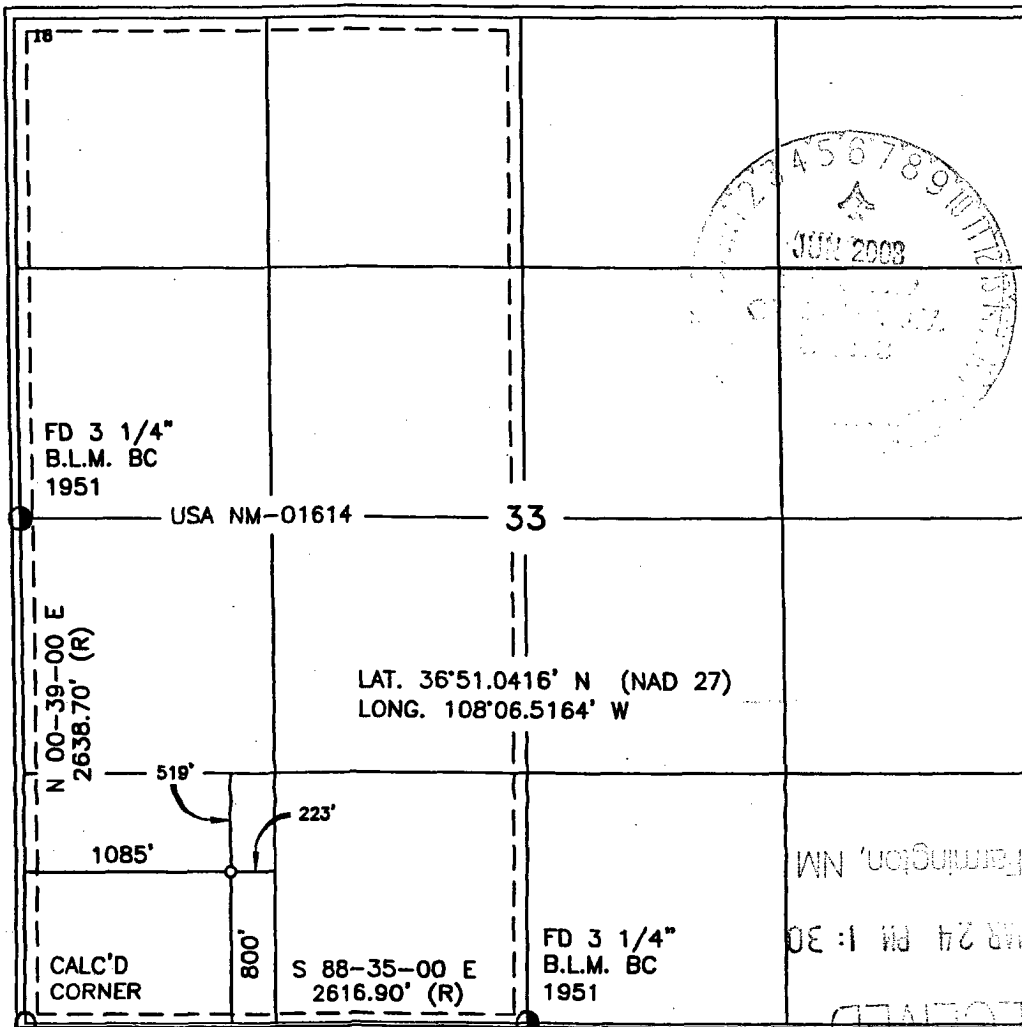
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	33	31-N	12-W		800'	SOUTH	1085'	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
*Dedicated Acres FTC - W/320					*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



¹⁷ OPERATOR CERTIFICATION

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

Peggy Cole
Signature
Peggy Cole
Printed Name
Regulatory Supervisor
Title
3-12-03
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

Date of Survey
Signature and Seal of Registered Professional Surveyor

14827
Certificate Number

OPERATIONS PLAN

Well Name: Thompson #103
Location: 800' FSL, 1085' FWL Section 33, T-31-N, R-12-W
San Juan County, NM
Formation: Basin Fruitland Coal
Elevation: 5944' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	528'	
Ojo Alamo	528'	637'	aquifer
Kirtland	637'	1886'	
Fruitland	1886'	2231'	gas
B/Basal Coal	2231'	2232'	gas
Pictured Cliffs	2232'	2432'	gas
Total Depth	2432'		

Logging Program: Cased hole: GR/DEN/CAL - TD to surface
Mudlog: none
Coring Program: none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-2432'	Non-dispersed	8.4-9.5	30-60	no control

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

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
8 3/4"	0' - 120'	7"	20.0#	J-55
6 1/4"	0' - 2432'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 2432'	2 3/8"	4.7#	J-55
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Float Equipment: 7" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - guide shoe and self-fill float collar. Three centralizers run every other joint above shoe. Nine centralizers run every 3rd joint to the base of the Ojo Alamo @ 637'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 637'. 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 screw on independent wellhead.

Cementing:

7" surface casing - cement with 38 sx Class "B" Type III cement with 0.25 pps Celloflake and 3% calcium chloride (54 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.

4 1/2" production casing - Lead w/117 sx Premium Lite cement w/3% calcium chloride, 1/4 pps Cello-flake, 5 pps LCM-1, 0.4% FL-52, and 0.4% SMS. Tail w/90 sx Type III cement w/1% calcium chloride, 1/4 pps Cello-flake, and 0.2% FL-52 (374 cu.ft. of slurry, 50% excess to circulate to surface.) If cement is not circulated to surface, a temperature survey or CBL will be run during drilling or completion operations to determine TOC.

4-1/2" production casing alternative two stage - Stage collar@ 1786'. First stage: cement with 72 sxs Type III cmt w/1% calcium chloride, 0.25 pps flocele, 0.2% fluid loss. Second stage: 130 sxs Premium Lite cmt w/3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS (374 cu.ft. of slurry, 50% excess to circulate to surface).

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

BOP and tests:

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

Completion - 7 1/16" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 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 and commingled.
- * Anticipated pore pressure for the Fruitland is 570 psi.
- * This gas is dedicated.
- * The west half of Section 33 is dedicated to the Fruitland Coal.


Drilling Engineer

3/18/03
Date