

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

7/22 PM 1:27
070 Farmington, NM

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
990' FNL, 1715' FWL
Latitude 36° 51.6070'N, Longitude 108° 04.2300'W

5. Lease Number
NMSF078120A
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name
32856

8. Farm or Lease Name
Crandell Com

9. Well Number
501

10. Field, Pool, Wildcat
Basin Fruitland Coal

11. Sec., Twn, Rge, Mer. (NMPM)
C Sec. 35, T-31-N, R-12-W
API # 30-045-31797

12. County
San Juan

13. State
NM

14. Distance in Miles from Nearest Town
7 miles to Aztec

15. Distance from Proposed Location to Nearest Property or Lease Line
990'

16. Acres in Lease

17. Acres Assigned to Well
320 N/2

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease
75'

19. Proposed Depth
2556'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
5945' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: [Signature]
Regulatory/Compliance Supervisor Date 7-9-03

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY /s/ David J. Mankiewicz TITLE _____ DATE AUG 26 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.

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 II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

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

OIL CONSERVATION DIVISION

PO Box 2088

Santa Fe, NM 87504-2088

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045- 31797		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 32856	*Property Name CRANDELL COM		*Well Number 501
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP		*Elevation 5945

¹⁰ Surface Location

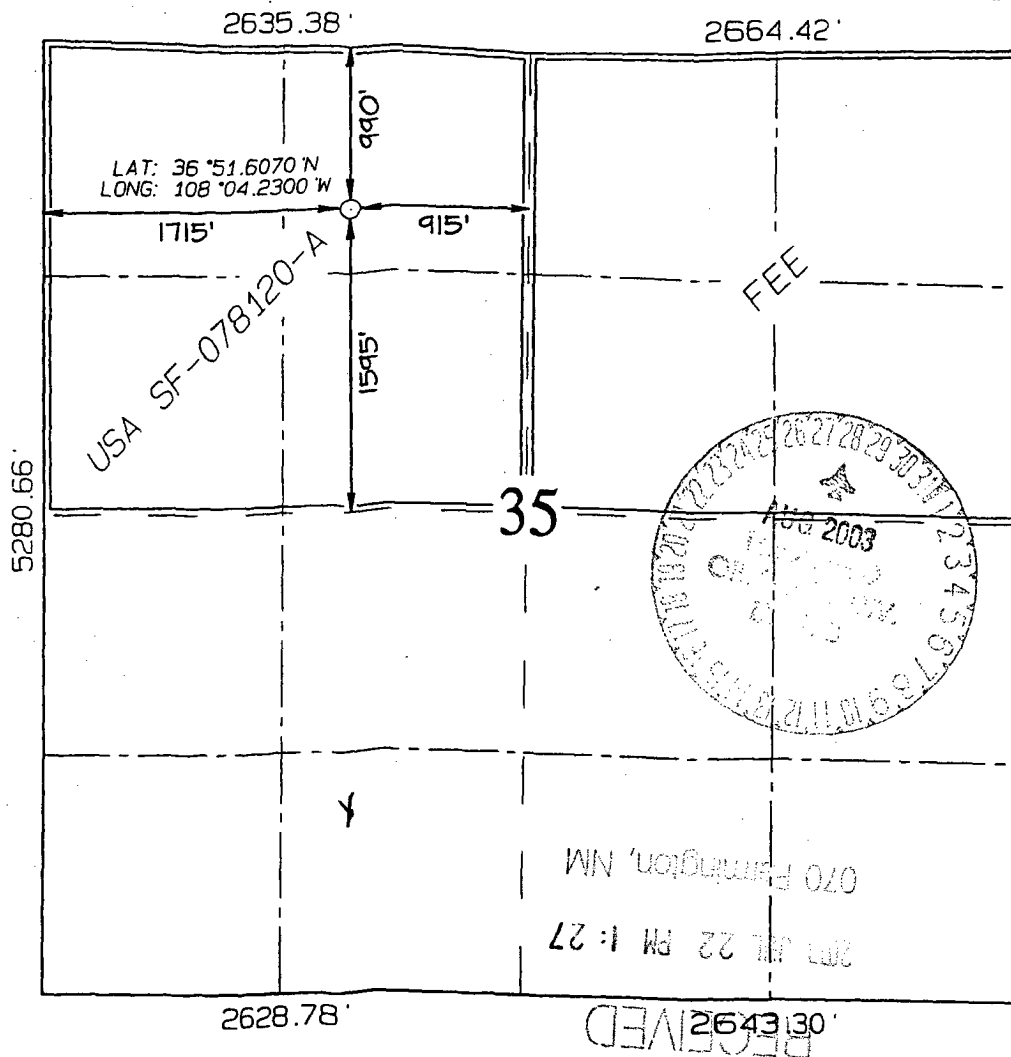
U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	35	31N	12W		990	NORTH	1715	WEST	SAN JUAN

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
15				12					

¹² Dedicated Acres N/320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

7-9-03


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: MAY 7, 2003

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

OPERATIONS PLAN

Well Name: Crandell Com #501
Location: 990' FNL, 1715' FWL Section 35, T-31-N, R-12-W
Latitude 36° 51.6070' N, Longitude 108° 04.2300' W
San Juan County, NM
Formation: Basin Fruitland Coal
Elevation: 5945' GL

Formation:	Top	Bottom	Contents
Surface	Animas	716'	
Ojo Alamo	716'	764'	aquifer
Kirtland	764'	2002'	
Fruitland	2002'	2065'	gas
Fruitland Coal	2065'	2346'	gas
B/Coal	2346'	2356'	gas
Pictured Cliffs	2356'		gas
Total Depth	2556'		

Logging Program: none
Mud log: none
Coring Program: none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-2556'	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' - 2556'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 2556'	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. Standard centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 764'. 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/126 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 (393 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.

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.

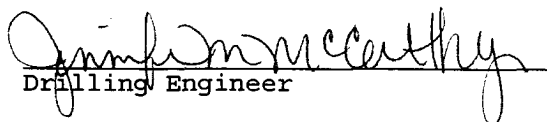
Completion - 7 1/16" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 min.

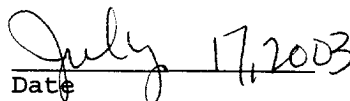
From surface to TD - choke manifold (Reference Figure #3).

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 500 psi.
- * This gas is dedicated.
- * The north half of Section 35 is dedicated to the Fruitland Coal.


Drilling Engineer


Date