

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

1a. Type of Work DRILL	5. Lease Number NMSF076465 Unit Reporting Number 070 Farmington, NM
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON RESOURCES</b> Oil & Gas Company	7. Unit Agreement Name 32338
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Cornell Com 9. Well Number 500
4. Location of Well 840' FSL, 1550' FWL Latitude 36° 45.0045, Longitude 108° 04.2828	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) N Sec. 2, T-29-N, R-12-W API # 30-045-31580
14. Distance in Miles from Nearest Town 8 miles to Farmington	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 840'	
16. Acres in Lease	17. Acres Assigned to Well 321 5/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1200'	
19. Proposed Depth 2112'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 5793' GR	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>3-12-03</u>

PERMIT NO.

APPROVAL DATE

APPROVED BY /s/ David J. Mankiewicz

TITLE

DATE APR 29 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

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

NMOC

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

Instructions on back  
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- <b>31580</b>	*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code <b>32338</b>	*Property Name CORNELL COM	*Well Number 500
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP	*Elevation 5793'

<sup>10</sup> Surface Location

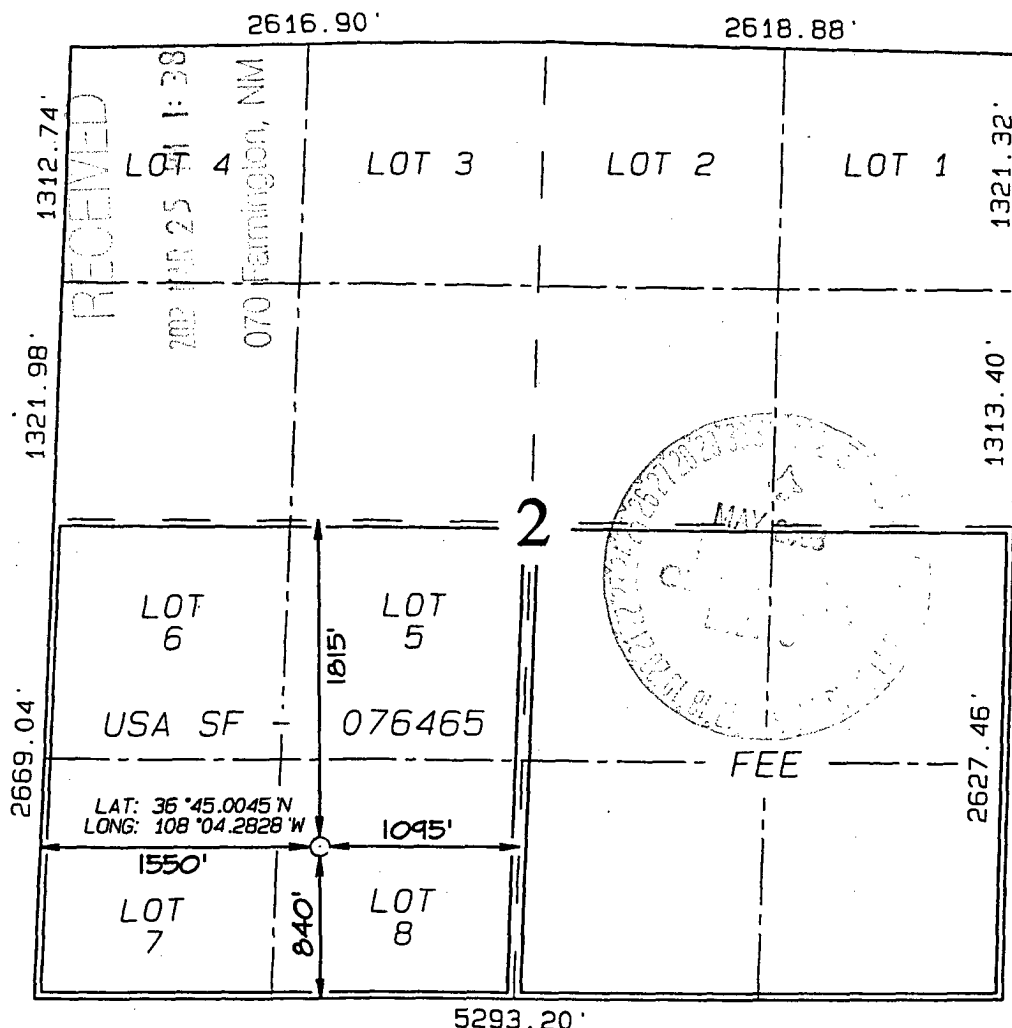
UL or lot no.	Section	Township	Range	Lot 1 on	Feet from the	North/South line	Feet from the	East/West line	County
N	2	29N	12W		840	SOUTH	1550	WEST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface:

UL or lot no.	Section	Township	Range	Lot 1 on	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres FTC - S/321	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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



<sup>17</sup> 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

Date

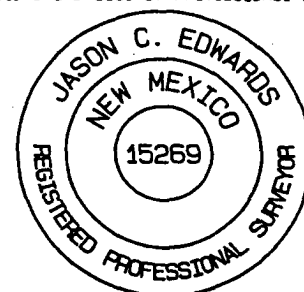
3-12-03

<sup>18</sup> 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.

Survey Date: JANUARY 15, 2003

Signature and Seal of Professional Surveyor



*JASON C. EDWARDS*  
Certificate Number 15269

# OPERATIONS PLAN

Well Name: Cornell Com #500  
Location: 840' FSL, 1550' FWL Section 2, T-29-N, R-12-W  
San Juan County, NM  
Formation: Basin Fruitland Coal  
Elevation: 5793' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	539'	
Ojo Alamo	539'	696'	aquifer
Kirtland	696'	1569'	
Fruitland	1569'	1907'	gas
B/Basal Coal	1907'	1912'	gas
Pictured Cliffs	1912'	2112'	gas
Total Depth	2112'		

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
120-2112'	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' - 2112'	4 1/2"	10.5#	J-55

## Tubing Program:

0' - 2112'	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 3<sup>rd</sup> joint to the base of the Ojo Alamo @ 696'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 696'. 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/95 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 (325 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 @ 1469'. First stage: cement with 72 sxs Type III cmt w/1% calcium chloride, 0.25 pps flocele, 0.2% fluid loss. Second stage: 106 sxs Premium Lite cmt w/3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS (325 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.

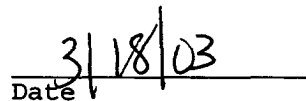
From surface to TD - choke manifold (Reference Figure #3).

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 south half of Section 2 is dedicated to the Fruitland Coal.

  
Drilling Engineer

  
Date