UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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070 Farmington, NM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

OCT 2003

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
685'FSL, 570'FWL

Latitude 36° 51.8900'N, Longitude 108° 04.4629'W

5. Lease Number
NMSF077652

Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name
East

9. Well Number
10N

10. Field, Pool, Wildcat
Blanco Mesaverde/
Basin Dakota

11. Sec., Twn, Rge, Mer. (NMPM)
M Sec.26, T-31-N, R-12-W

API # 30-045- 31845

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

12. County San Juan **13. State** NM

15. Distance from Proposed Location to Nearest Property or Lease Line
570'

16. Acres in Lease

17. Acres Assigned to Well
320 W2

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
1179'

19. Proposed Depth
7125'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
6028' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Peggy Cole
Regulatory/Compliance Supervisor

Date 8-8-03

PERMIT NO.

APPROVAL DATE

APPROVED BY /s/ David J. Mankiewicz **TITLE**

DATE OCT 16 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".

NMOCD

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

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

[1] API Number	[2] Pool Code	[3] Pool Name
30-045- 31845	72319/71599	Blanco Mesaverde/Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Number
18517	EAST	10 N

[7] OGRID No.	[8] Operator Name	[9] Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY LP	6028

[10] Surface Location

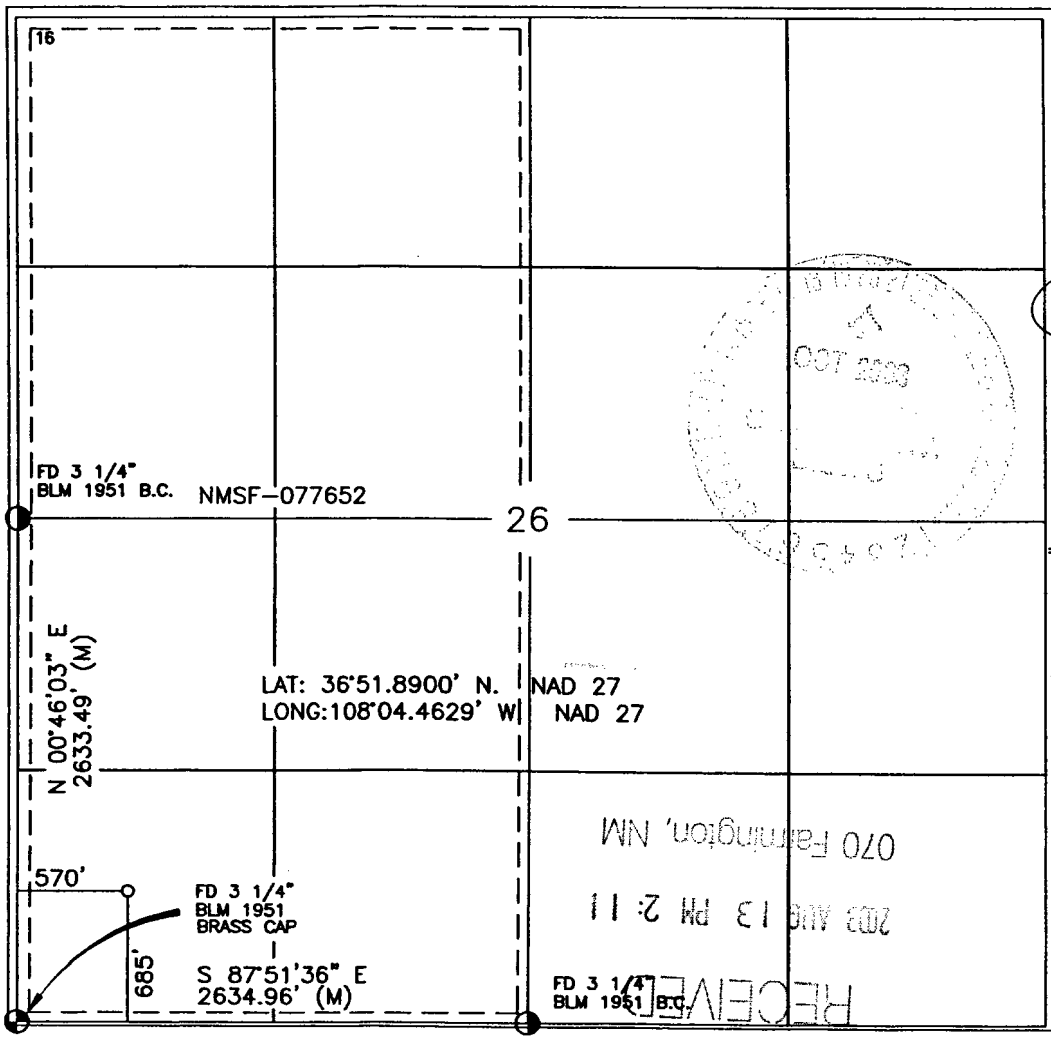
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	26	31-N	12-W		685	SOUTH	570	WEST	SAN JUAN

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
W/320			

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
Regulatroy Supervisor
Title
8-8-03
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.

7-28-03
Date of Survey
Signature and Seal of Professional Surveyor:

DAVID J. JOHNSON
NEW MEXICO
14827
REGISTERED PROFESSIONAL SURVEYOR

14827
Certificate Number

OPERATIONS PLAN

Well Name: East #10N
Location: 685'FSL, 570'FWL, Sec 26, T-31-N, R-12-W
San Juan County, NM
Latitude 36° 51.8900'N, Longitude 108° 04.4629'W
Formation: Blanco Mesaverde/Basin Dakota
Elevation: 6028'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	745'	
Ojo Alamo	745'	795'	aquifer
Kirtland	795'	2105'	gas
Fruitland	2105'	2425'	gas
Pictured Cliffs	2425'	2550'	gas
Lewis	2550'	3180'	gas
Huerfanito Bentonite	3180'	3525'	gas
Chacra	3525'	4015'	gas
Massive Cliff House	4015'	4240'	gas
Menefee	4240'	4780'	gas
Intermediate TD	**4390'**		
Massive Point Lookout	4780'	5155'	gas
Mancos	5155'	6060'	
Gallup	6060'	6805'	gas
Greenhorn	6805'	6865'	
Graneros	6865'	6925'	
Two Wells	6925'	6990'	gas
Paguate	6990'	7050'	gas
Cubero	7050'	7125'	gas
TD	**7125'**		

Logging Program:
Cased hole - CBL/CCL/GR - TD to surface
Open hole - none
Mud Log - none
Cores - none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120- 4390'	LSND	8.4-9.0	30-60	no control
4390- 7125'	Air/N2	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

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

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 4390'	7"	20#	J55
6 1/4"	0' - 7125'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 7125'	2 3/8"	4.7#	J-55

BOP Specifications, Wellhead and Tests:
Surface to Intermediate TD -
11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, BOPE and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -
11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, BOPE and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -
2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -
7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead -
9 5/8" x 7" x 4 ½" x 2 3/8" x 2000 psi tree assembly.

General -
- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9-5/8" surface casing - cement with 32 sxs Class A, B Portland Type I, II cement (38 cu.ft. of slurry, bring cement to surface through 3/4" line) or equivalent. WOC 24 hours for pre-set holes or 8 hours for conventionally set holes before pressure testing or drilling out from under surface casing.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -
Lead w/406 sx Premium Lite with 3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail with 90 sx Type III cmt w/1% calcium chloride, 0.25 pps celloflake, 0.2% fluid loss (990 cu.ft. of slurry, 50% excess to circulate to surface). WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar at 1805'. First stage: Pump 215 sxs Premium Lite with 3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sx Type III cmt w/1% calcium chloride, 0.25 pps celloflake, 0.2% fluid loss. Second stage: w/191 sx Premium Lite with 3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (990 cu.ft. of slurry, 50% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every third joint off bottom, to the base of the Ojo Alamo at 795'. Two turbolating centralizers at the base of the Ojo Alamo at 795'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production casing -
Pump 191 sxs Premium Lite HS FM w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (378 cu.ft., 30% excess to cmt 7" & 4 ½" overlap). WOC a minimum of 18 hrs prior to completing.

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

Cement float shoe on bottom with float collar spaced on top of float shoe.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Additional Information:

- The Dakota, and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	1000 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The west half of Section 26 is dedicated to the Mesa Verde and Dakota in this well.
- This gas is dedicated.

Sean Corrigan
Drilling Engineer

August 12, 2003