

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number SF-065557A Unit Reporting Number
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 Cornell 9. Well Number #4R
4. Location of Well 1695' FNL, 1820' FWL Latitude 36° 43.7, Longitude 108° 04.2	10. Field, Pool, Wildcat Fulcher Kutz Pict'd Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) F Sec. 14, T-29-N, R-12-W API # 30-045-30844
14. Distance in Miles from Nearest Town 7 miles from Farmington	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1695'	
16. Acres in Lease	17. Acres Assigned to Well 162.66 NW/4
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1200'	
19. Proposed Depth 1922'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 5655' 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>9-17-01</u>

PERMIT NO.

APPROVAL DATE 10/29/01

APPROVED BY [Signature]

TITLE AFM Minerals

DATE 10/30/01

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.

NADOL

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District I
PO Box 1980, Hobbs, NM 88241-1980

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

PO 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

*API Number 30-045-30844		*Pool Code 77200		*Pool Name Fulcher Kutz Pictured Cliffs	
*Property Code 6928		*Property Name CORNELL			*Well Number 4R
*GRID No. 14538		*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP			*Elevation 5655'

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
F	14	29N	12W		1695	NORTH	1820	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 NW/4 162.66		13 Joint or Infill		14 Consolidation Code		15 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

<p>15</p> <p>5446.32'</p> <p>LOT 2</p> <p>LOT 1</p> <p>2636.70'</p> <p>USA</p> <p>SF-065557-A</p> <p>1820'</p> <p>LOT 3</p> <p>LOT 4</p> <p>LAT: 36°43.7'N LONG: 108°04.2'W</p> <p>1695'</p> <p>LOT 5</p> <p>LOT 6</p> <p>5314.32'</p>				<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Peggy Cole</i></p> <p>Signature</p> <p>Peggy Cole</p> <p>Printed Name</p> <p>Regulatory Supervisor</p> <p>Title</p> <p>9-17-81</p> <p>Date</p>	
<p>14</p> <p>LOT 10</p> <p>LOT 9</p> <p>LOT 8</p> <p>LOT 7</p> <p>2641.32'</p> <p>LOT 11</p> <p>LOT 12</p> <p>LOT 13</p> <p>LOT 14</p> <p>5426.52'</p>				<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JUNE 7, 2001</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>NEALE C. EDWARDS</p> <p>NEW MEXICO</p> <p>6857</p> <p>Certificate</p> <p>6857</p>	

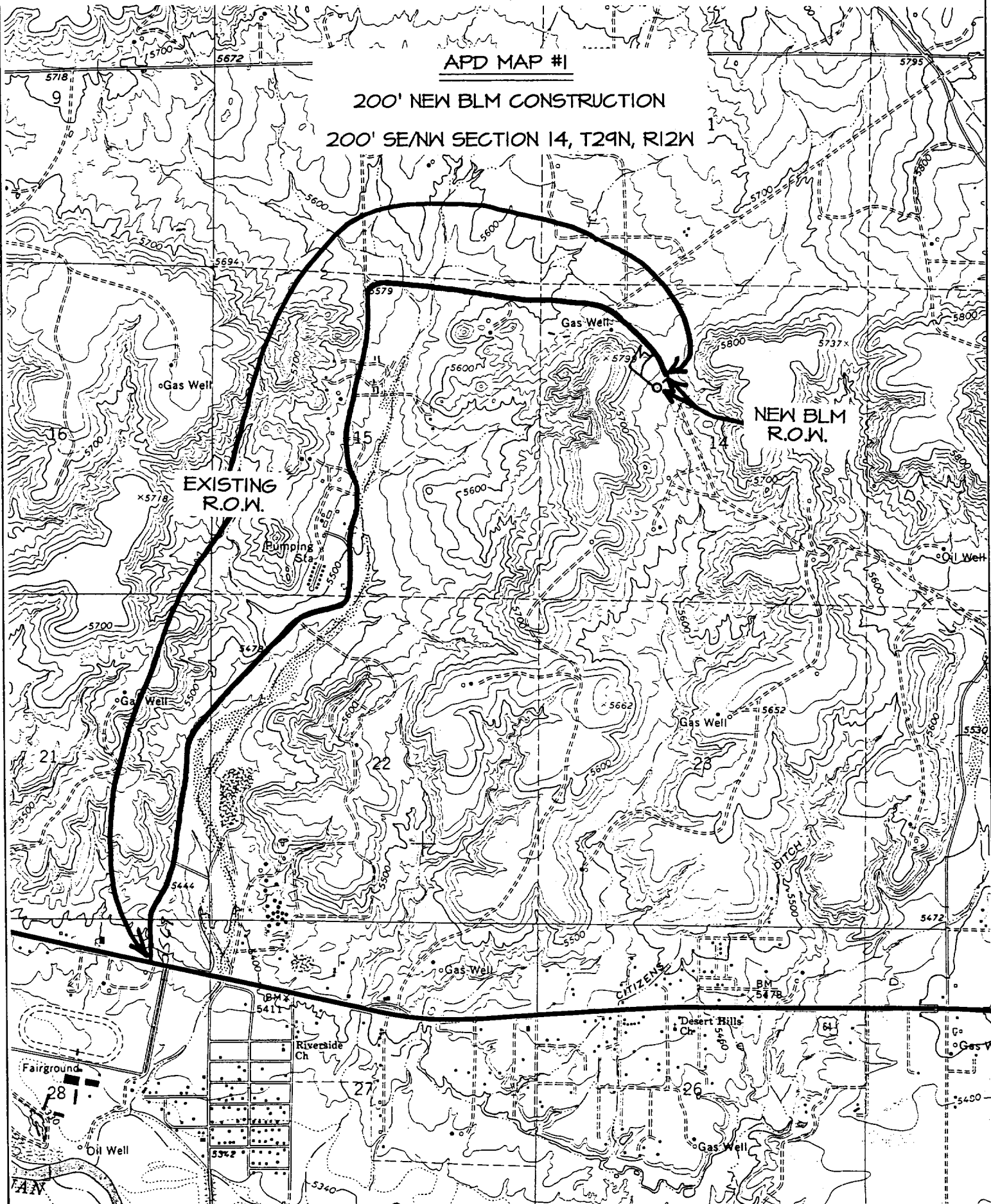
BURLINGTON RESOURCES OIL & GAS COMPANY CORNELL #4R

1695' FNL & 1820' FWL, SECTION 14, T29N, R12W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

APD MAP #1

200' NEW BLM CONSTRUCTION

200' SE/NW SECTION 14, T29N, R12W



OPERATIONS PLAN

Well Name: Cornell #4R
Location: 1695' FNL, 1820' FWL, Section 14, T-29-N, R-12-W
San Juan County, New Mexico
Latitude 36° 43.7', Longitude 108° 04.2'
Formation: Fulcher Kutz Pictured Cliffs
Elevation: 5655' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	389'	
Ojo Alamo	389'	518'	aquifer
Kirtland	518'	1121'	gas
Fruitland	1121'	1722'	gas
Pictured Cliffs	1722'		gas
Total Depth	1922'		

Logging Program: cased hole - CBL/GR/CCL TD to surface

Coring Program: None

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-1922'	FW	8.4-9.0	32-45	no control

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

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
9 7/8"	0 - 120'	7"	20#	J-55
6 1/4"	0 - 1922'	2 7/8"	6.5#	J-55

Float Equipment: 7" surface casing - saw tooth guide shoe.
Centralizers will be run in accordance with Onshore Order #2.

2 7/8" production casing - float shoe on bottom. Three centralizers run every other joint above shoe. Seven centralizers run every 3rd joint to the base of the Ojo Alamo @ 518'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 518'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 7" x 2 7/8" 2000 psi screw on independent wellhead.

Cementing:

7" surface casing - cement with 27 sx Class A, B Portland Type I, II cement (32 cu.ft. of slurry, bring cement to surface through 3/4" line). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

2 7/8" production casing - Lead w/244 sx Premium Lite cement w/3% calcium chloride, 1/4 pps flocele, 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 flocele, and 0.2% FL-52 (646 cu.ft. of slurry, 100% 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 to 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.

BOP and tests (If a coiled tubing drilling (CTD) rig is utilized.):

Surface to TD: 7-1/16" 2000 psi (minimum) Torus annular BOP stack (Reference Figure #1b). Prior to drilling out surface casing, test annular BOP to 600psi/30 min.

Completion: 7-1/16" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test blind rams and casing to 1500 psi for 30 minutes; all pipe rams and casing to 1500 psi for 30 minutes each. **Same as in original APD operations plan.**

From surface to TD: choke manifold (Reference Figure #3). **Same as in original APD operations plan.**

The annular BOP will be actuated to close on drill pipe (coiled tubing) at least once each day and to close on open hole once each trip to test proper functioning.

Additional information:

- * The Pictured Cliffs formation will be completed.
- * Anticipated pore pressure for the Pictured Cliffs is 500 psi.
- * This gas is dedicated.
- * The northwest quarter of Section 14 is dedicated to the Pictured Cliffs.

Eric J. Giles
Drilling Engineer

9/20/01
Date