

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2001 SEP 21 4:07

1a. Type of Work DRILL	5. Lease Number NM-01772-A 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 Reid 9. Well Number 16R
4. Location of Well 1785' FSL, 845' FWL Latitude 36° 39.6, Longitude 107° 50.1	10. Field, Pool, Wildcat Basin Fruitland Coal/ Aztec Pictured Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) L Sec. 18, T-28-N, R-9-W API # 30-045-30847
14. Distance in Miles from Nearest Town 11.2 miles from int. Hwy 550 & Hwy 64, Bloomfield	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 845'	
16. Acres in Lease	17. Acres Assigned to Well FC: 282.28 W/2 PC: 141.29 SW/4
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 873'	
19. Proposed Depth 2196'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 5803' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"
24. Authorized by: <u>[Signature]</u> Regulatory/Compliance Supervisor	Date <u>9-14-01</u>

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report to be submitted


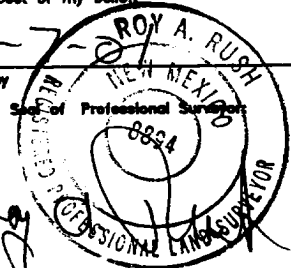
Threatened and Endangered Species Report to be submitted

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

<p>LOT 1</p> <p>NM-01772-A</p> <p>LOT 2</p> <p>QTR. CORNER FD 2 1/2" GLO 1916 B.C.</p>		<p align="center">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> <hr/> <p align="right"><i>Peggy Cole</i></p> <p>Signature _____</p> <p>Peggy Cole Printed Name _____</p> <p>Regulatory Supervisor Title _____</p> <p align="right">9-14-01</p> <p>Date _____</p>
<p>LOT 3</p> <p>NM-01772-A</p> <p>845' 193'</p> <p>LAT: 36°39.6' N. LONG: 107°50.1' W.</p> <p>N 00°04'.08" W 2636.82' (M)</p>	<p>18</p>	<p align="center">18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plot 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> <hr/> <p align="right">6-7-01</p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyor _____</p> <div style="text-align: right;">  8894 </div>
<p>LOT 4</p> <p>SEC. CORNER FD 2 1/2"</p> <p>1785'</p>	<p align="center">19</p>	<p align="center">QTR. CORNER FD 2 1/2"</p>

BURLINGTON RESOURCES OIL & GAS INC.

REID #16R

SW/4 SEC.18, T-28-N, R-9-W, N.M.P.M.

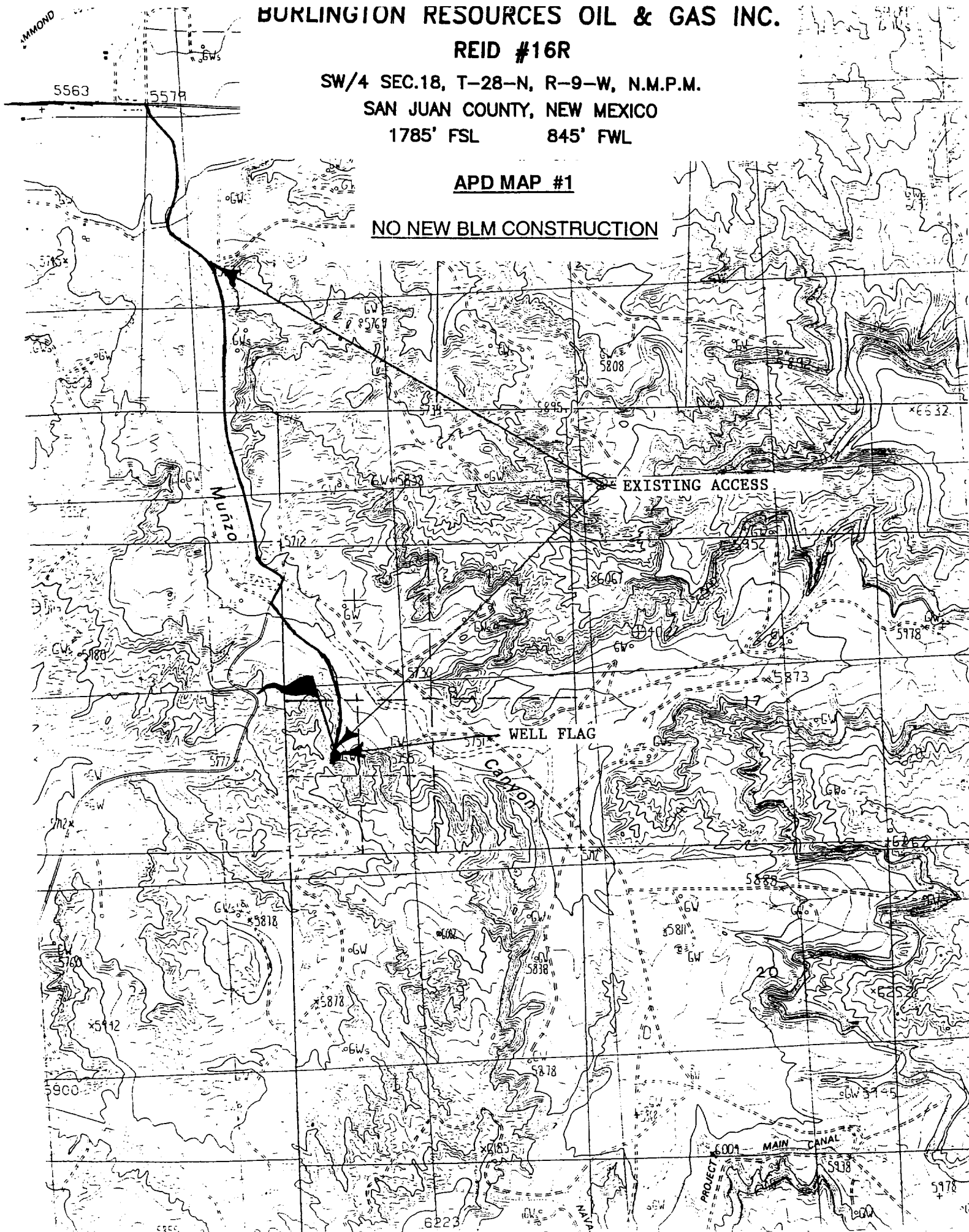
SAN JUAN COUNTY, NEW MEXICO

1785' FSL

845' FWL

APD MAP #1

NO NEW BLM CONSTRUCTION



OPERATIONS PLAN

Well Name: Reid #16R
Location: 1785' FSL, 845' FWL Section 18, T-28-N, R-9-W
Latitude 36° 39.6' N, Longitude 107° 50.1' W
San Juan County, NM
Formation: Basin Fruitland Coal/Aztec Pictured Cliffs
Elevation: 5803' GL

Formation:	Top	Bottom	Contents
Surface	San Jose	936'	
Ojo Alamo	936'	1055'	aquifer
Kirtland	1055'	1512'	gas
Fruitland	1512'	1996'	gas
Pictured Cliffs	1996'	2196'	gas
Total Depth	2196'		

Logging Program: Open hole: none

Cased hole: CBL/GR/CCL

Mudlog: none

Coring Program: none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud	8.4-9.0	40-50	no control
120-2196'	Non-dispersed	8.4-9.5	30-60	no control

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

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
9 7/8"	0' - 120'	7"	20.0#	J-55
6 1/4"	0' - 2196'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 2196'	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. Seven centralizers run every 3rd joint to the base of the Ojo Alamo @ 1055'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1055'. 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 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.

4 1/2" production casing - Lead w/288 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 (738 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 Fruitland Coal & Pictured Cliffs formations will be completed and commingled.
- * Anticipated pore pressure for the Fruitland is 570 psi.
- * Anticipated pore pressure for the Pictured Cliffs is 500 psi.
- * This gas is dedicated.
- * The west half of Section 18 is dedicated to the Fruitland Coal and the southwest quarter of Section 18 is dedicated to the Pictured Cliffs.

Eric J. Giles
Drilling Engineer

9/20/01
Date