

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 NMSF078197 Unit Reporting Number 070 Farmington, NM
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 Rock Island Federal 9. Well Number 1M
4. Location of Well 1775' FSL, 1020' FEL Latitude 36° 44.3021'N, Longitude 107° 52.0496'W	10. Field, Pool, Wildcat Otero Chacra/Blanco Mesaverde/Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) I Sec. 9, T-29-N, R-10-W API # 30-045-31737
14. Distance in Miles from Nearest Town 7 miles to P.O. in Blanco, NM	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1020'	
16. Acres in Lease	17. Acres Assigned to Well Cha: 159.54 MV/DK: 320.56 5/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 278'	
19. Proposed Depth 6850'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 5712' 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>4-9-03</u>

PERMIT NO.

APPROVAL DATE

APPROVED BY

David J. Markiewicz

TITLE

DATE

AUG - 4 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".

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

NMOCD

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719DISTRICT III
4000 Rio Brazos Rd., Aztec, N.M. 87410DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088Instructions 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 30-045- 31737	² Pool Code 82329/72319/71599	³ Pool Name Otero Chacra/Blanco Mesaverde/Basin Dakota
⁴ Property Code 7436	⁵ Property Name ROCK ISLAND FEDERAL	⁶ Well Number 1M
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS INC.	⁹ Elevation 5712

¹⁰ Surface Location

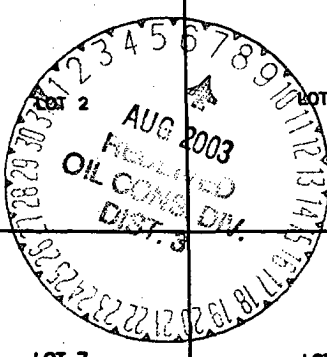
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	9	29-N	10-W		1775	SOUTH	1020	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

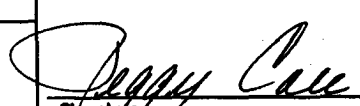
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres Cha - 159.54 MV/DK - S/320.56			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		

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


16

LOT 4	LOT 3			LOT 1
LOT 5	LOT 6 LAT: 36°44.3021' N. (NAD 27) LONG: 107°52.0496' W. (NAD 27)	LOT 7	LOT 8 QTR. CORNER FD 3 1/4" BLM 1967 BC	
USA SF-078197 LOT 12	USA SF-078197 LOT 11	USA SF-078197 WRIGHT, M A KAEMPF, L WRIGHT, MILDRED A KAEMPF, LAURA LOT 10	USA SF-078197 LOT 9	
USA SF-078197 LOT 13	WRIGHT, M A KAEMPF, L LOT 14 QTR. CORNER FD 3 1/4" BLM 1967 BC	KAEMPF, LAURA WRIGHT, M A KAEMPF, L WRIGHT, MILDRED A LOT 15 S 88°55'21" W 2656.6' (M)	WRIGHT, M A KAEMPF, L KAEMPF, LAURA WRIGHT, MILDRED A LOT 16 SEC. CORNER FD 3 1/4" BLM 1967 BC	

17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief


Signature
Peggy Cole
Printed Name
Regulatory Supervisor
Title
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.

2-10-03
Date of Survey
Signature and Seal of Professional Surveyor

Certificate Number

OPERATIONS PLAN

Well Name: Rock Island Federal #1M
Location: 1775' FSL, 1020' FEL, Sec 9, T-29-N, R-10-W
San Juan County, NM
Latitude 36° 44.3021'N, Longitude 107° 52.0496'W
Formation: Otero Chacra/Blanco Mesaverde/Basin Dakota
Elevation: 5712' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	894'	
Ojo Alamo	894'	1004'	aquifer
Kirtland	1004'	1824'	gas
Fruitland	1824'	2114'	gas
Pictured Cliffs	2114'	2204'	gas
Lewis	2204'	2724'	gas
Intermediate TD	2304'		
Huerfano Bentonite	2724'	3104'	gas
Chacra	3104'	3764'	gas
Massive Cliff House	3764'	3804'	gas
Menefee	3804'	4414'	gas
Massive Point Lookout	4414'	4799'	gas
Mancos	4799'	5634'	
Gallup	5634'	6370'	gas
Greenhorn	6370'	6436'	
Graneros	6436'	6490'	
Dakota	6490'	6801'	gas
Morrison	6801'	6840'	
TD	6850'		

Logging Program:

Cased hole - CBL/CCL/GR - TD to surface
Open hole - Platform Express: DIL/GR - TD to surface casing,
Density/Neutron/Porosity w/RT - TD to 6270'; 4700' to 3700',
Bulk Density/Correction, Microlog - TD to 6270'; 4700' to 3700'
Mudlog from TD to 6270' and 4700' to 3700'
Cores - none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 300'	Spud	8.4-9.0	40-50	no control
300- 6850'	LSND	8.4-9.0	30-60	no control

Pit levels will be visually monitored to detect gain or loss of fluid 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>
12 1/4"	0' - 300'	8 5/8"	32.0#	H-40
7 7/8"	300' - 6850'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 6850' 2 3/8" 4.7# J-55

BOP Specifications, Wellhead and Tests:

Surface to TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).
After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 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
will be tested to 2000 psi for 15 minutes.

Wellhead -

8 5/8" x 4 1/2" 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:

8-5/8" surface casing - cement with 265 sxs Type III cement w/2% calcium chloride, 0.25 pps celloflake (371 cu.ft. of slurry, bring cement to surface). WOC 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.

4 1/2" production casing -

Pump 841 sxs Premium Lite HS FM w/0.7% fluid loss, 4 pps Pheno-seal, 0.2% CD-32, 3 pps CSE (1950 cu.ft., 25% excess to circulate to surface). WOC a minimum of 18 hrs prior to completing. If cement does not circ to surface a temperature survey or CBL will be run to determine TOC.

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

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom to 6400' & every fourth joint up to the base of the Ojo Alamo at 1004'. Two turbolating centralizers at the base of the Ojo Alamo at 1004'. Bowspring centralizers spaced every fourth joint to surface casing.

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