

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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
1025' FNL, 1390' FEL
Latitude 36° 48.9073, Longitude 107° 39.3888

5. Lease Number
NMSF078578A
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name
Howell K

9. Well Number
300S

10. Field, Pool, Wildcat
Basin Fruitland Coal

11. Sec., Twn, Rge, Mer. (NMPM)
B Sec. 15, T-30-N, R-8-W
API # 30-045- 31322

12. County
San Juan

13. State
NM

14. Distance in Miles from Nearest Town
12.5 miles to Blanco Post Office

15. Distance from Proposed Location to Nearest Property or Lease Line
1025'

16. Acres in Lease

17. Acres Assigned to Well
312.42 E/2

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease
48'

19. Proposed Depth
2724'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
5837' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: [Signature]
Regulatory/Compliance Supervisor Date 1-2-03

PERMIT NO. _____ APPROVAL DATE MAY 15 2003

APPROVED BY Original Signed: Stephen Mason TITLE _____ DATE MAY 15 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

NMOC

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

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87506

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

ED Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

3 JAN -8 PM 1:16

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045- 31322		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 7130	*Property Name HOWELL K		*Well Number 300S
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS, INC.		*Elevation 5837'

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
B	15	30-N	8-W		1025'	NORTH	1390'	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 E/312.42			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>16</p> <p>FD 3 1/4" B.L.M. BC 1956</p>	<p>N 86-55-01 W</p>	<p>5455.43' (M)</p>	<p>FD 3 1/4" B.L.M. BC 1956</p>
<p>LAT. 36°48.9073' N (NAD 27) LONG. 107°39.3888' W</p>		<p>1025'</p> <p>26'</p> <p>1390'</p> <p>209'</p>	<p>S 06-43-57 W 2467.13' (M)</p>
		<p>1338'</p> <p>USA SF-078578-A</p>	
<p>15</p> <p>LOT 2</p>		<p>LOT 1</p> <p>FD 3 1/4" B.L.M. BC 1956</p>	
<p>LOT 3</p>		<p>LOT 4</p>	

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: Peggy Cole

Title: Regulatory Supervisor

Date: 1-2-03

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.

Date of Survey: Nov 5 2002

Signature and Seal of Professional Surveyor: DAVID A. JOHNSON

14827

Certificate Number: 14827

OPERATIONS PLAN

Well Name: Howell K #300S
Location: 1025' FNL, 1390' FEL Section 15, T-30-N, R-8-W
Latitude 36° 48.9073'N, Longitude 107° 39.3888'W
San Juan County, NM
Formation: Basin Fruitland Coal
Elevation: 5837' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1533'	
Ojo Alamo	1533'	1677'	aquifer
Kirtland	1677'	2111'	
Fruitland	2111'	2483'	
Intermediate TD	2453'		
Fruitland Coal	2483'	2724'	gas
B/Basal Coal	2724'	2731'	gas
Total Depth	2724'		
Pictured Cliffs	2731'		

Logging Program: GR/RHOB
Mudlog: 7" casing shoe to TD
Coring Program: none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-2453'	Non-dispersed	8.4-9.0	30-60	no control
2453-2724'	Air/Mist			

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' - 2453'	7"	20.0#	J-55
6 1/4"	2453' - 2724'	open hole		

Tubing Program:

0' - 2724'	2 3/8"	4.7#	J-55
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Float Equipment: 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill float collar. Standard centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1677'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 9 5/8" x 7" x 2 3/8" x 11" 2000 psi xmas tree assembly.

Cementing:

9 5/8" surface casing - cement with 32 sx 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.

7" intermediate casing - lead w/285 sacks Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack flocele, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks Type III cmt with 1% calcium chloride, 1/4#/sack flocele and 0.2% FL-52 (732 cu.ft., 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 intermediate TD - 11" 2000 psi (minimum) double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test rams to 600#/30 min.

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test blind rams and casing to 1500 psi for 30 minutes; all pipe rams and casing to 1500 psi for 30 minutes each.

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.
- * Anticipated pore pressure for the Fruitland is less than 500 psi.
- * This gas is dedicated.
- * The east half of section 15 is dedicated to the Fruitland Coal.

Date: 1/8/03

Drilling Engineer:

Eric J. Diles