

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number NMNM58887 Unit Reporting Number 070 Farmington, NM
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON RESOURCES</b> 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 Newco 9. Well Number 100S
4. Location of Well 2575' FNL, 465' FWL Latitude 36° 58.2238, Longitude 107° 48.5528	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) 5 Sec. 20, T-32-N, R-9-W API # 30-045- 31426
14. Distance in Miles from Nearest Town 21 miles to intersection Hwy 550 & Hwy 173 in Aztec	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 465'	17. Acres Assigned to Well 317.89 <i>W/P</i>
16. Acres in Lease	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 75'	20. Rotary or Cable Tools Rotary
19. Proposed Depth 3584'	
21. Elevations (DF, FT, GR, Etc.) 6754'	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <i>Regan Cole</i> Regulatory/Compliance Supervisor	Date <i>1-9-03</i>

PERMIT NO. \_\_\_\_\_ APPROVAL DATE *6/2/03*  
APPROVED BY Original Signed: Stephen Mason TITLE \_\_\_\_\_ DATE *6/2/03*

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

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

NMOC

DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 CopiesDISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088☐ AMENDED REPORTDISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-31426	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code 7361	<sup>5</sup> Property Name NEWCO	<sup>6</sup> Well Number 100S
<sup>7</sup> GRID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS INC.	<sup>9</sup> Elevation 6754

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	20	32-N	9-W		2575	NORTH	465	WEST	SAN JUAN

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres W/317.89			<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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

<div><div>FD 3 1/4" BLM 1966 BC</div><div>LOT 4</div><div>2575'</div><div>LOT 3</div><div>LOT 2</div><div>LOT 1</div><div>FD 3 1/4" BLM 1966 BC</div><div>LOT 5</div><div>LAT: 36°58.2238' N. (NAD 27) LONG: 107°48.5528' W. (NAD 27)</div><div>LOT 6</div><div>USA NM-58887</div><div>LOT 7</div><div>LOT 8</div><div>LOT 9</div><div>LOT 10</div><div>LOT 11</div><div>LOT 12</div><div>LOT 13</div><div>LOT 14</div><div>LOT 15</div></div>				<div><div><div>17</div><div>OPERATOR CERTIFICATION</div><div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div><div><div>Signature</div><div>Peggy Cole</div><div>Printed Name</div><div>Regulatory Supervisor</div><div>Title</div><div>1-9-03</div><div>Date</div></div></div></div>
<div><div>FD 3 1/4" BLM 1966 B.C.</div><div>LOT 12</div><div>LOT 11</div><div>LOT 10</div><div>LOT 9</div><div>LOT 8</div><div>LOT 7</div><div>LOT 6</div><div>LOT 5</div><div>LOT 4</div><div>LOT 3</div><div>LOT 2</div><div>LOT 1</div><div>LOT 15</div><div>LOT 14</div><div>LOT 13</div><div>LOT 12</div><div>LOT 11</div><div>LOT 10</div><div>LOT 9</div><div>LOT 8</div><div>LOT 7</div><div>LOT 6</div><div>LOT 5</div><div>LOT 4</div><div>LOT 3</div><div>LOT 2</div><div>LOT 1</div></div>				<div><div><div>18</div><div>SURVEYOR CERTIFICATION</div><div>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</div><div><div>12</div><div>DAVID A. JOHNSON</div><div>NEW MEXICO</div><div>REGISTERED PROFESSIONAL SURVEYOR</div><div>14827</div><div>14827</div><div>Certificate Number</div></div></div></div>

OPERATIONS PLAN

Well Name: Newco #100S  
Location: 2575' FNL, 465' FWL Section 20, T-32-N, R-9-W  
Latitude 36° 58.2238'N, Longitude 107° 48.5528'W  
San Juan County, NM  
Formation: Basin Fruitland Coal  
Elevation: 6754' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	2193'	
Ojo Alamo	2193'	2290'	aquifer
Kirtland	2290'	2955'	
Fruitland	2955'	3314'	
Intermediate TD	3284'		
Fruitland Coal	3314'	3584'	gas
B/Basal Coal	3584'	3585'	gas
Total Depth	3584'		
Pictured Cliffs	3585'		

Logging Program: none  
Coring Program: none

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120-3284'	Non-dispersed	8.4-9.0	30-60	no control
3284-3584'	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' - 3284'	7"	20.0#	J-55
6 1/4"	3284' - 3584'	open hole		

**Tubing Program:**

0' - 3584'	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 @ 2290'. 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/403 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 (982 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 west half of section 20 is dedicated to the Fruitland Coal.

Date: 1/16/03

Drilling Engineer:

Er. J. Giles