

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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BLM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

99 OCT 27 PM 3:42

1a. Type of Work DRILL	5. Lease Number SF-080781 Unit Reporting Number
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 Cain 9. Well Number 102
4. Location of Well 1925' FSL, 905' FWL Latitude 36° 39.6, Longitude 107° 54.4	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 16, T-28-N, R-10-W API # 30-045-
14. Distance in Miles from Nearest Town 10 miles from Bloomfield	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 905'	
16. Acres in Lease	17. Acres Assigned to Well 320 W/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1000'	
19. Proposed Depth 2010'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 5822' 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 Administrator	<u>10-25-99</u> Date

PERMIT NO. \_\_\_\_\_ APPROVAL DATE DEC 21 1999  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 12/3/99

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.

NMOOD

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

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070 FARMINGTON, NM ☒ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045 30020		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 18487	*Property Name CAIN		*Well Number 102
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 5822'

#### <sup>10</sup> Surface Location

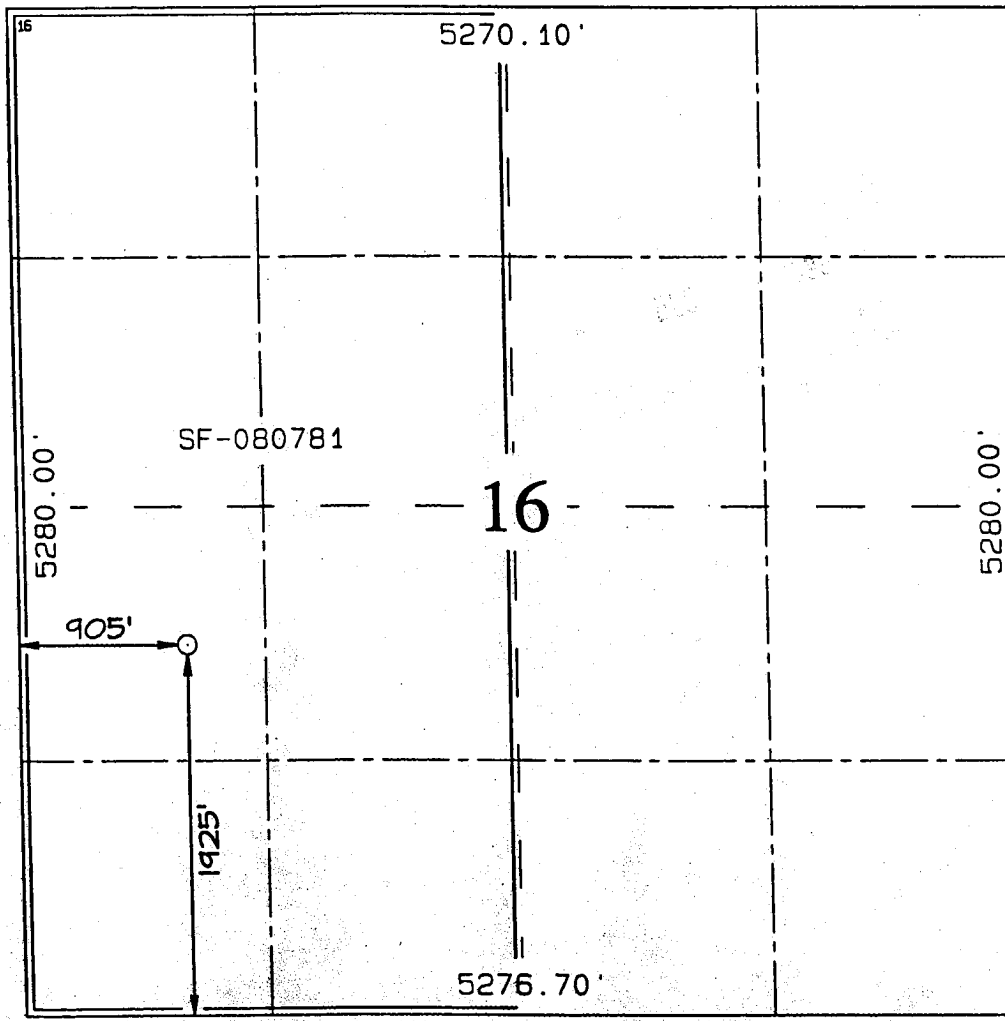
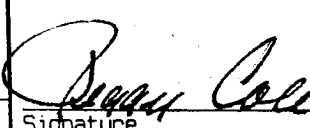
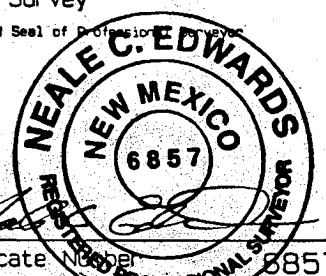
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	16	28N	10W		1925	SOUTH	905	WEST	SAN JUAN

#### <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/320	<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

	<b><sup>17</sup> OPERATOR CERTIFICATION</b> 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 Administrator Title 10-25-99 Date
	<b><sup>18</sup> SURVEYOR CERTIFICATION</b> 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.  AUGUST 27, 1999 Date of Survey Signature and Seal of Professional Surveyor  Certificate Number 6857

## OPERATIONS PLAN

**Well Name:** Cain #102  
**Location:** 1925' FSL, 905' FWL, Section 16, T-28-N, R-10-W  
San Juan County, New Mexico  
Latitude 36° 39.6, Longitude 107° 54.4  
**Formation:** Basin Fruitland Coal  
**Elevation:** 5822' GR

<b>Formation:</b>	<b>Top</b>	<b>Bottom</b>	<b>Contents</b>
Surface	San Jose	823'	
Ojo Alamo	823'	952'	aquifer
Kirtland	952'	1667'	gas
Fruitland	1667'	1908'	gas
Fruitland Coal	1908'	1910'	gas
Pictured Cliffs	1910'		
<b>Total Depth</b>	<b>2010'</b>		

**Logging Program:** GR/AIT/Nuet/Dens - TD to surface

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud	8.4-8.9	40-50	no control
120-2010'	Non-dispersed	8.4-9.5	30-60	no control

**Casing Program:**

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
8 3/4"	0 - 120'	7"	20.0#	J-55
6 1/4"	0 - 2010'	4 1/2"	10.5#	K-55

**Tubing Program:**

0 - 2010'	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 - float shoe on bottom. Three centralizers run every other joint above shoe. Two centralizers run every 3rd joint to the base of the Ojo Alamo @ 952'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 952'. 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 xmas tree assembly.

**Cementing:**

7" surface casing - cement with 46 sx Class "B" cement with 1/4 pps cellophane and 3% calcium chloride (54 cu ft of slurry, includes 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi/30 minutes.

BURLINGTON RESOURCES OIL & GAS COMPANY CAIN #102

1925' FSL & 905' FWL, SECTION 16, T28N, R10W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO

APD MAP #1

NO NEW CONSTRUCTION  
NW/SW SECTION 16, T28N, R10W.

