

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED  
COUNTY CLERK  
0707-11-15-11-16  
COUNTY CLERK, NM

1a. Type of Work  
DRILL -

5. Lease Number  
NM-33056  
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 87401  
(505) 326-9700

8. Farm or Lease Name  
Rattlesnake Canyon

9. Well Number  
105

4. Location of Well  
1680' FNL, 790' FEL  
Latitude 36° 58.3, Longitude 107° 41.5

10. Field, Pool, Wildcat  
Basin Fruitland Coal

11. Sec., Twn, Rge, Mer. (NMPM)  
H Sec. 20, T-32-N, R-8-W  
API # 30-045-29943 -

12. Distance in Miles from Nearest Town  
9 miles to Navajo Dam Post Office

12. County  
San Juan

13. State  
NM

15. Distance from Proposed Location to Nearest Property or Lease Line  
790'

16. Acres in Lease

17. Acres Assigned to Well  
320.00

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease  
3300'

19. Proposed Depth  
3715'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
6800' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program  
See Operations Plan attached

24. Authorized by: [Signature] 5-8-99  
Regulatory/Compliance Administrator Date

MINING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY J. L. - see page 3 TITLE \_\_\_\_\_ DATE Nov 30-00

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.

AWOCD

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

☐ AMENDED REPORT

070 FAULT, NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045 29943		*Pool Code 71629	*Pool Name Basin Fruitland Coal -
*Property Code 18605	*Property Name RATTLESNAKE CANYON		*Well Number 105
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 6800'

<sup>10</sup> Surface Location

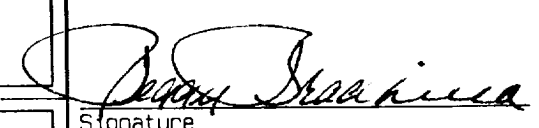
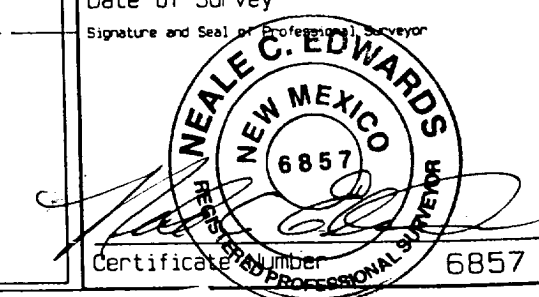
UL or lot no. H	Section 20	Township 32N	Range 8W	Lot Idn	Feet from the 1680	North/South line NORTH	Feet from the 790	East/West line EAST	County SAN JUAN
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres E/320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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>5184.30'</div> <div>SF-079013</div> <div>1680'</div> <div>790'</div> <div>5262.18'</div> <div>NM-33056</div> <div>5186.28'</div> <div>SF-079013</div>	<div><sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.   Signature Peggy Bradfield Printed Name Regulatory Administrator Title 5-8-99 Date</div> <div><sup>18</sup> 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.  FEBRUARY 22, 1999 Date of Survey  Signature and Seal of Professional Surveyor NEALE C. EDWARDS NEW MEXICO 6857 Certificate Number 6857</div>
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submitted in lieu of Form 3160-5

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells  
MAR 23 PM 2:51

1. Type of Well  
GAS

2. Name of 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, Footage, Sec., T, R, M

1680' FNL, 790' FEL, Sec. 20, T-32-N, R-8-W, NMPM

5. Lease Number  
NM-33056

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number

Rattlesnake Canyon #105

API Well No.

30-045-

10. Field and Pool

Basin Fruitland Coal

11. County and State

San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

☒ Notice of Intent

☐ Abandonment

☐ Change of Plans

☐ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Final Abandonment

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

☐ Conversion to Injection

☒ Other -

13. Describe Proposed or Completed Operations

Attached is the revised pipeline plat for the subject well.

14. I hereby certify that the foregoing is true and correct.

Signed *Regan Cole* Title Regulatory Administrator Date 3/22/00

TLW

(This space for Federal or State Office use)

APPROVED BY *As/ Jim Lovato* Title \_\_\_\_\_ Date 30

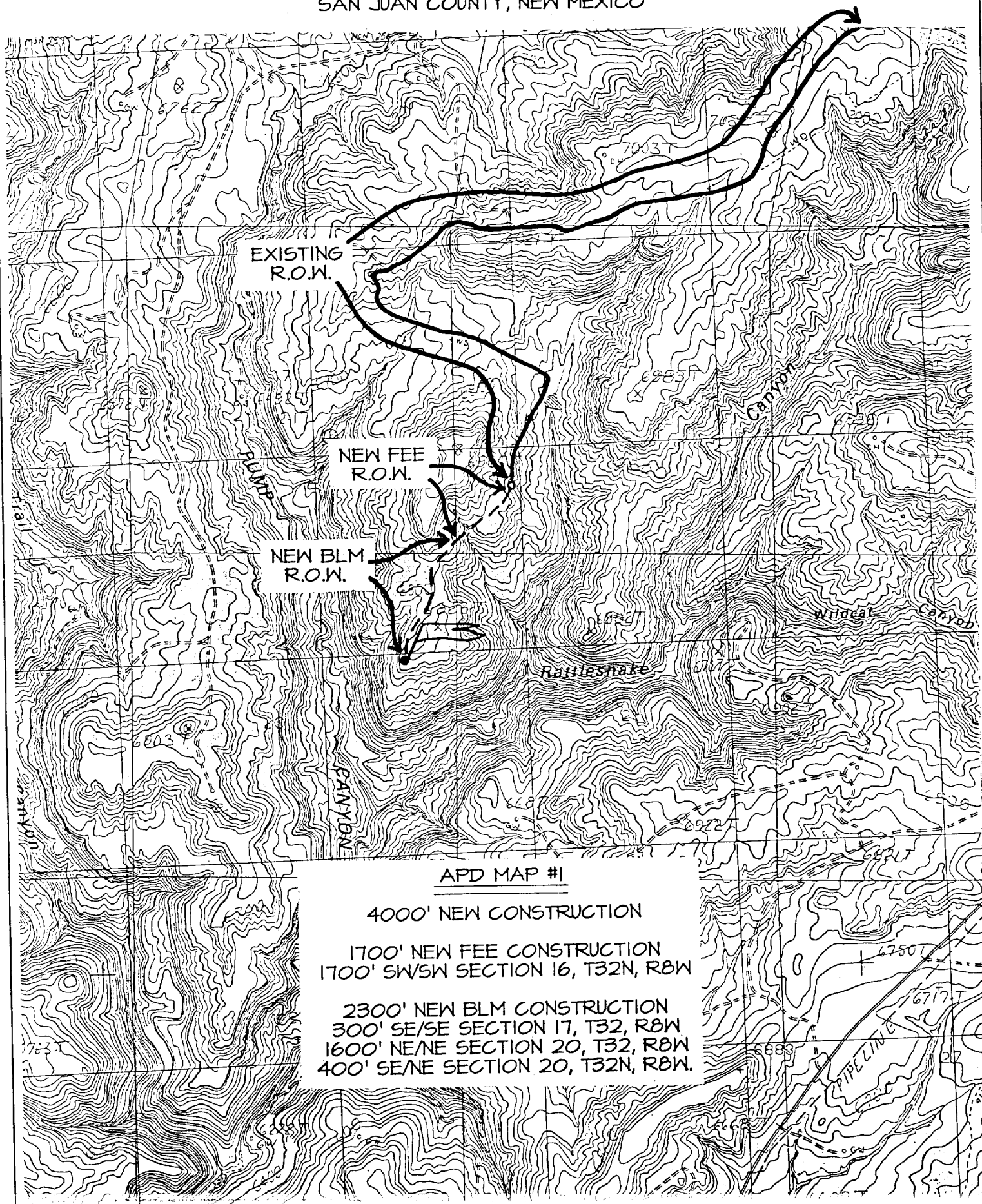
CONDITION OF APPROVAL, if any:

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 representations as to any matter within its jurisdiction.

NMDCD

# BURLINGTON RESOURCES OIL & GAS COMPANY RATTLESNAKE CANYON #105

1680' FNL & 790' FEL, SECTION 20, T32N, R8W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO



## OPERATIONS PLAN

**Well Name:** Rattlesnake Canyon #105  
**Location:** 1680' FNL, 790' FEL, Section 20, T-32-N, R-8-W  
Latitude 36° 58.3, Longitude 107° 41.5  
San Juan County, NM  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6800' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	2502'	
Ojo Alamo	2502'	2552'	aquifer
Kirtland	2552'	3342'	gas
Fruitland	3342'	3502'	gas
Coal	3502'		gas
<b>Total Depth</b>	<b>3715'</b>		

**Logging Program:** GR/Ind/Neutron/Density - TD to intermediate casing  
GR/NPHI - to surface

**Coring Program:** none

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200-3715'	Non-dispersed	8.4-9.0	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>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3450'	7"	20.0#	J-55
6 1/4"	3350' - 3715'	5 1/2"	15.5#	K-55

**Tubing Program:**

0' - 3715'	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. Three centralizers run every fourth joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2552'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

5 1/2" production casing - Pre-drilled liner run to the 7" casing with an overlap. Liner hanger is a slip grip type.

**Wellhead Equipment:** 9 5/8" x 7" x 2 3/8" x 11" 3000 psi xmas tree assembly.

**Rattlesnake Canyon #105**

**Cementing:**

9 5/8" surface casing - cement with 163 sx Class "B" cement with ¼ pps cellophane and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi/30 minutes.

7" intermediate casing - lead w/349 sacks Class "B" with 3% sodium metasilicate, 7 pps kolite, and 1/2 pps sack cellophane. Tail with 90 sacks 50/50 Class "B" Pozmix with 2% gel, 2% calcium chloride, 1/2 pps flocele and 7 pps kolite (1141 cu.ft., 120% excess to circulate to surface).

5 1/2" liner - uncemented.

**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" 3000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test blind rams and casing to 2500 psi for 30 minutes; all pipe rams and casing to 2500 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 1000 psi.
- This gas is dedicated.
- The east half of the section is dedicated to this well.

Date: 5/7/99

Drilling Engineer: Rede C. White