

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
DRILL ☒ DEEPEN ☐

b. TYPE OF WELL  
OIL WELL ☐ GAS WELL ☒ OTHER ☐

2. NAME OF OPERATOR  
Elm Ridge Resources, Inc. (505) 632-3476

3. ADDRESS AND TELEPHONE NO.  
P. O. Box 189, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface 1780' FNL & 1777' FEL  
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
22 air miles SSW of Bloomfield

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
1,777'

16. NO. OF ACRES IN LEASE  
1,680

17. NO. OF ACRES ASSIGNED TO THIS WELL  
E/P 320

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
3,175'

19. PROPOSED DEPTH  
1,350'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
6,355' ungraded

22. APPROX. DATE WORK WILL START\*  
July 1, 2002

5. LEASE DESIGNATION AND SERIAL NO.  
NMSF-078067

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A

7. UNIT AGREEMENT NAME  
32267 Unit 11

8. FARMOR LEASE NAME WELL NO.  
Carson 11 332R

9. API WELL NO.  
30-045-31019

10. FIELD AND POOL, OR WILDCAT  
Basin Fruit. Coal

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
611-25n-12w NMPM

12. COUNTY OR PARISH  
San Juan

13. STATE  
NM

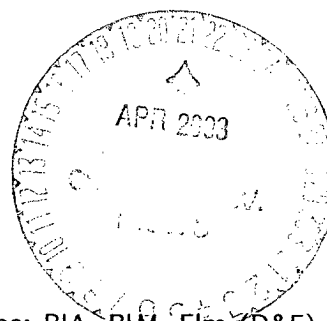
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-5/8"	K-55 7"	20	120'	~35 cu. ft. & to surface
6-3/4"	J-55 4-1/2"	10.5	1,350'	~340 cu. ft. & to surface

Lease issued February 1, 1948.

This action is subject to technical and procedural review pursuant to 43 CFR 3105.2 and appeal pursuant to 43 CFR 3105.4.

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



cc: BIA, BLM, Elm (D&F), FIMO, OCD (via BLM), Tribe

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Consultant (505) 466-8120 DATE 2-23-02

(This space for Federal or State office use)

PERMIT NO. Is/ David J. Mankiewicz

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

\*See Instructions On Reverse Side

NMOCD

APR 16 2003

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-045-31019</b>		Pool Code <b>71629</b>	Pool Name <b>BASIN FRUITLAND COAL GAS</b>	
Property Code <b>015454</b>	Property Name <b>32267 CARSON Unit 11</b>		Well Number <b>332R</b>	
OGRID No. <b>149052</b>	Operator Name <b>ELM RIDGE RESOURCES, INC.</b>			Elevation <b>6355'</b>

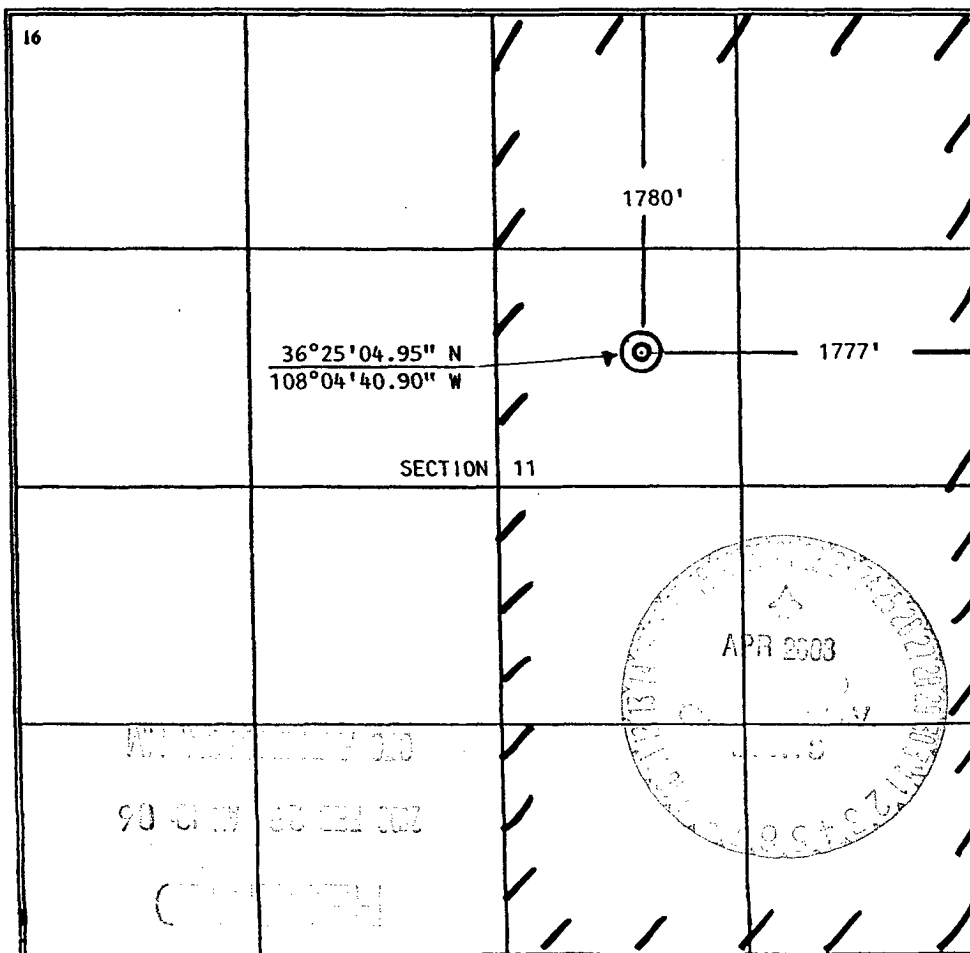
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	11	25N	12W	G	1780	NORTH	1777	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
Dedicated Acres <b>320</b>		Joint or Infill		Consolidation Code		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>16</div> 	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Brian Wood</i></p> <p>Signature <b>BRIAN WOOD</b></p> <p>Printed Name <b>CONSULTANT</b></p> <p>Title <b>FEB. 23, 2002</b></p> <p>Date</p>
	<div>18 SURVEYOR CERTIFICATION</div> <p>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.</p> <p>DECEMBER 31, 2001</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p><i>Edgar L. Risenhoover</i></p> <p>Certificate Number <b>5979</b></p>

Elm Ridge Resources, Inc.  
Carson 11 332R  
1780' FNL & 1777' FEL  
Sec. 11, T. 25 N., R. 12 W.  
San Juan County, New Mexico

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## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Sub Sea Elevation</u>
Nacimiento	000'	5'	+6,355'
Basal Fruitland Coal	1,182'	1,187'	+5,173'
Pictured Cliffs Ss	1,195'	1,200'	+5,160'
Total Depth (TD)*	1,350'	1,355'	+5,005'

\* all elevations reflect the existing ground level of 6,355'

### 2. NOTABLE ZONES

#### Oil & Gas Zones

Fruitland Coal (1,182')  
Pictured Cliffs (1,195')

#### Water Zones

Nacimiento (000')

#### Coal Zones

Fruitland (1,182')

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

### 3. PRESSURE CONTROL

The exact drill rig and BOP model to be used are not yet known. (A typical 2,000 psi model is on PAGE 3.) BOP and choke manifold system will be installed and tested to 500 psi before drilling surface casing plug. It will remain in use until the well is completed or abandoned. A safety valve and sub with a full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

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All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to assure good mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place.

#### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>GL Setting Depth</u>
8-5/8"	7"	20	K-55	ST&C	New	120'
6-3/4"	4-1/2"	10.5	J-55	LT&C	New	1,350'

Surface casing will be cemented to the surface with  $\approx 35$  cubic feet ( $\approx 30$  sacks) Class B + 1/4 pound per sack cello flake + 2%  $\text{CaCl}_2$ . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Two centralizers will be run. Thread lock guide shoe and bottom of float collar.

Production casing hole will be cleaned of rock chips by circulating  $\geq 150\%$  of the hole volume with mud to the surface. Thirty-five barrels of fresh water will then be circulated. Lead with  $\approx 215$  cubic feet ( $\approx 105$  sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack and weight = 12.5 pounds per gallon). Tail with  $\approx 125$  cubic feet ( $\approx 105$  sacks) of Class B with 2%  $\text{CaCl}_2$  (yield = 1.18 cubic feet per sack and weight = 15.2 pounds per gallon). Total cement volume is 240 cubic feet based on 75% excess and circulating to surface.

Production casing will be cemented to the surface with  $\approx 290$  cubic feet ( $\approx 345$  sacks) Class B with 2% gel. Volume is based on 80% excess. At least four centralizers will be used.