

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 ☐

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

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

675' FNL & 1952' FEL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

20 air miles S of Bloomfield

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

675'

16. NO. OF ACRES IN LEASE

1,280.30

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

5/2

320

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

6,486'

19. PROPOSED DEPTH

1,350'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6,362' ungraded

22. APPROX. DATE WORK WILL START\*

Apr. 7, 2002

23.

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

On site inspection with Kathy Ollom.  
Archaeology report CASA 02-16 filed 2-14-02.

ALL OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
REQUIREMENTS

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.

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

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

2-24-02

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

4/15/02

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

*[Signature]*

DATE

AFM

DATE

APR 12  
APR 15

\*See Instructions On Reverse Side

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

1 API Number 30-065-31013		2 Pool Code 71629		3 Pool Name BASIN FRUITLAND COAL GAS	
4 Property Code 004554		5 Property Name EAST BISTI COAL		6 Well Number 8	
7 OGRID No. 149052		8 Operator Name ELM RIDGE RESOURCES, INC.		9 Elevation 6362'	

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
	8	25N	11W	B	675	North	1952	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

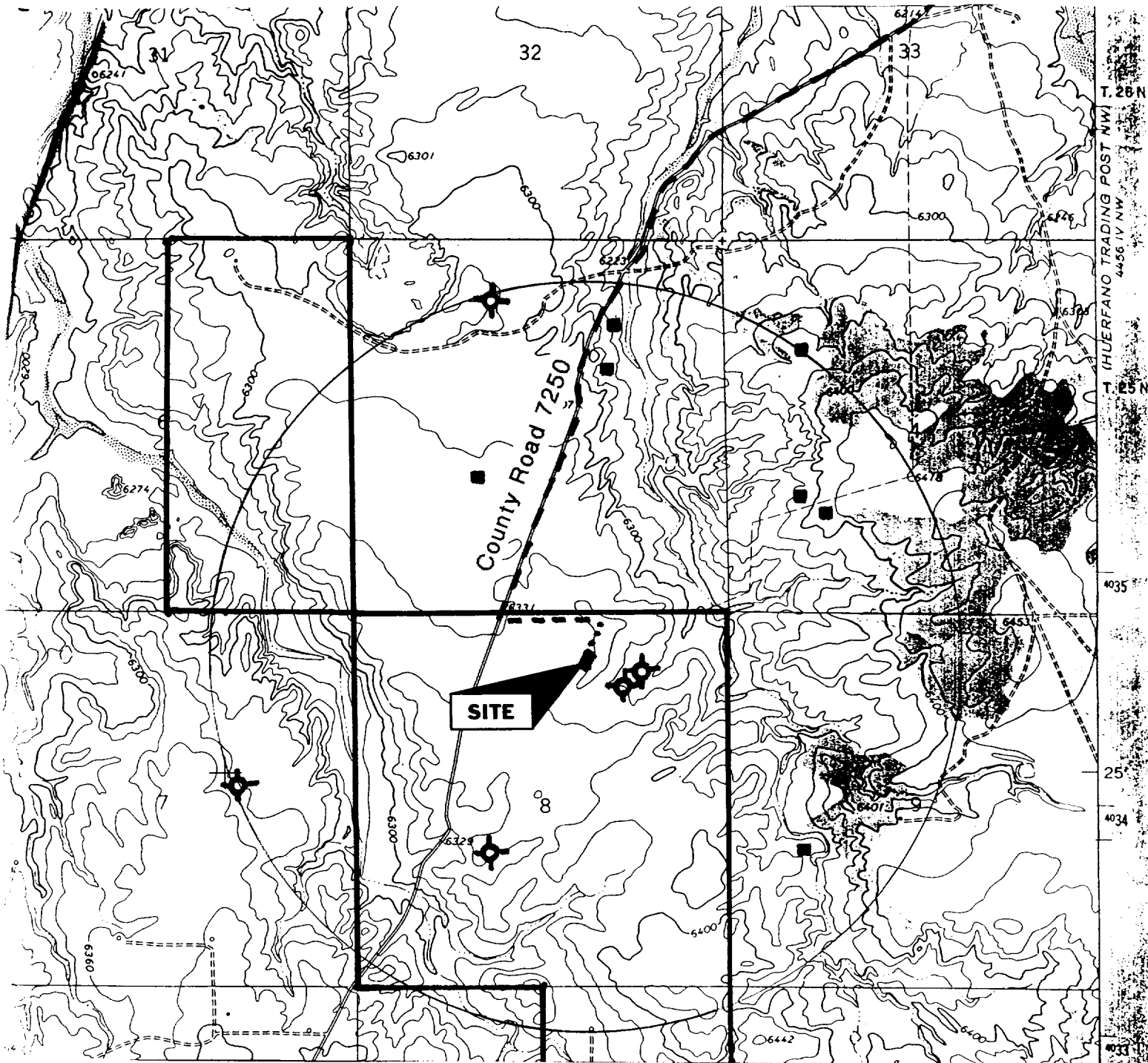
12 Dedicated Acres 320	13 Joint or Infill .	14 Consolidation Code .	15 Order No. .
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief   Signature BRIAN WOOD Printed Name CONSULTANT Title FEB. 24, 2002 Date	
		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. February 4, 2002 Date of Survey Signature and Seal of Registered Professional Surveyor:  Certificate Number	

Elm Ridge Resources, Inc.  
 East Bisti Coal 8 1R  
 675' FNL & 1952' FEL  
 Sec. 8, T. 25 N., R. 11 W.  
 San Juan County, New Mexico

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PROPOSED WELL: ★ JEEP TRAIL: - - -  
 EXISTING WELL: ■ EXISTING ROAD: — — —  
 P & A WELL: ★ LEASE BOUNDARY: —

**PERMITS WEST** INC.  
 PROVIDING PERMITS FOR LAND USERS

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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'	+6,362'
Fruitland Coal	987'	992'	+5,375'
Basal Fruitland Coal	1,232'	1,237'	+5,130'
Pictured Cliffs Ss	1,287'	1,292'	+5,075'
Total Depth (TD)*	1,350'	1,355'	+5,012'

\* all elevations reflect the ungraded ground level of 6,362'

### 2. NOTABLE ZONES

<u>Oil &amp; Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland Coals (987')	Nacimiento (000')	Fruitland (987')
Pictured Cliffs (1,219')		

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.