

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) 326-7099

3. ADDRESS AND TELEPHONE NO.

312 W. LaPlata, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1450' FSL & 1190' FWL

At proposed prod. zone

Same

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

6 air miles SW of Lindrith, NM

15. DISTANCE FROM PROPOSED\*

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

1450'

16. NO. OF ACRES IN LEASE

2217.7

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

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

2448'

19. PROPOSED DEPTH

3,161'

20. ROTARY OR CABLE TOOLS

Rotary

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

7,175' ungraded ground

22. APPROX. DATE WORK WILL START\*

Dec. 1, 1999

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-5/8"	7" (K-55)	20#	250'	≈60 cu ft & to surface
6-3/4"	4-1/2" (J-55)	10.5#	3,161'	≈698 cu ft & to surface



99 NOV - 9 11:10:42  
ALBUQUERQUE, N.M.

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

11-4-99

(This space for Federal or State office use)

PERMIT NO.

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

*[Signature]*  
chse

TITLE

Asst Field Manager

DATE

01-20-00

\*See Instructions On Reverse Side

District I  
1625 N. French Dr., Hobbs, NM 88240

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised March 17, 1994

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-26325		<sup>2</sup> Pool Code 72439	<sup>3</sup> Pool Name SOUTH BLANCO PC
<sup>4</sup> Property Code 19030	<sup>5</sup> Property Name Apache I		<sup>6</sup> Well Number 11
<sup>7</sup> OGRID No. 149052	<sup>8</sup> Operator Name ELM RIDGE RESOURCES		<sup>9</sup> Elevation 7175'

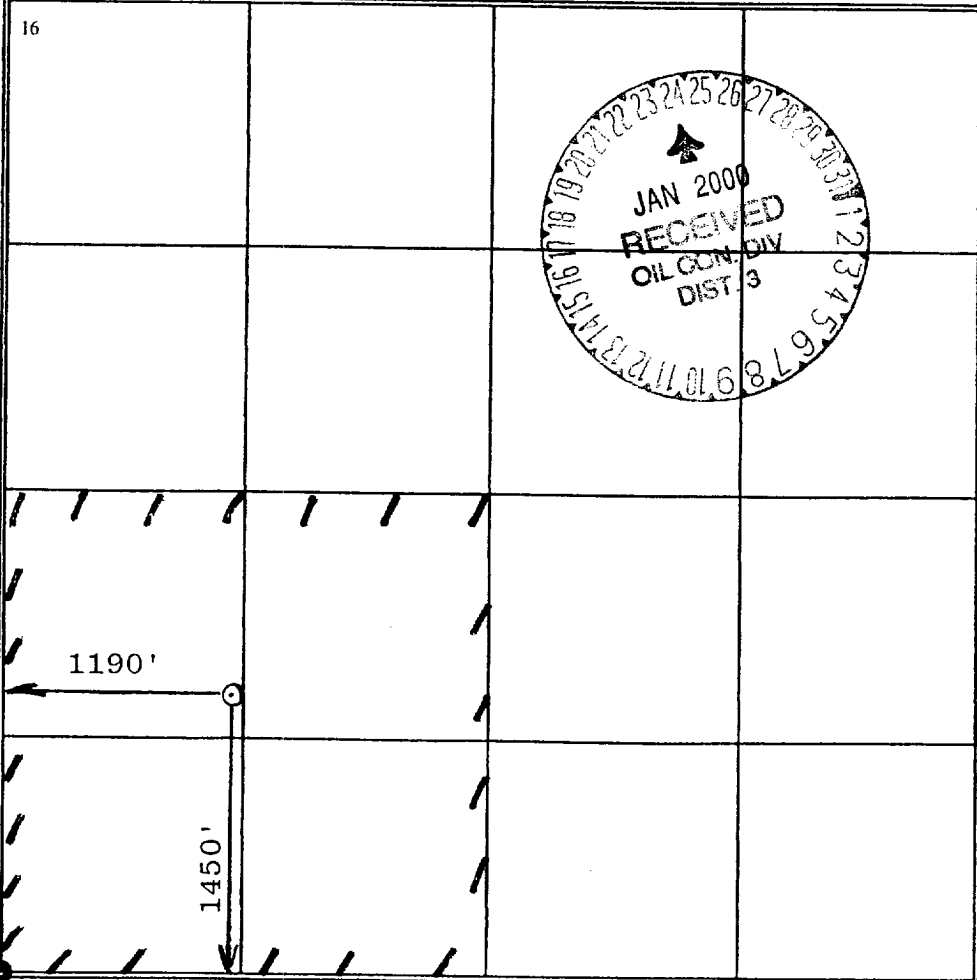
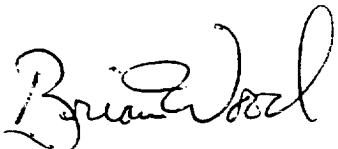
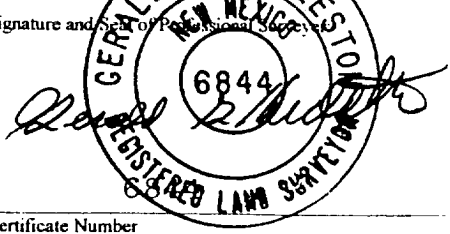
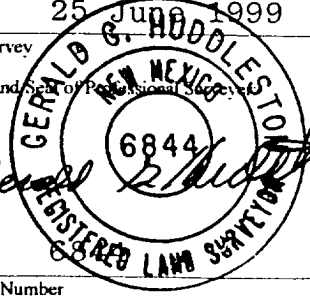
<sup>10</sup> Surface Location

<sup>10</sup> U.L. or lot no. L	Section 1	Township 23 N	Range 3 W	Lot Idn	Feet from the . 1450'	North/South line . South	Feet from the . 1190'	East/West line . West	County Rio Arriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

<sup>11</sup> U.L. 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	<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

<sup>16</sup> 	<p><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</p> <p> Signature BRIAN WOOD</p> <p>Printed Name CONSULTANT</p> <p>Title NOV. 4, 1999</p> <p>Date</p>
	<p><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.</p> <p>25 June 1999 Date of Survey</p> <p> Signature and Seal of Professional Surveyor</p> <p></p> <p>Certificate Number</p>

Elm Ridge Resources, Inc.  
Apache I #11  
1450' FSL & 1190' FWL  
Sec. 1, T. 23 N., R. 3 W.  
Rio Arriba 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>Subsea Elevation</u>
San Jose	000'	5'	+7,175'
Ojo Alamo Ss	2,569'	2,574'	+4,606'
Kirtland Shale	2,747'	2,752'	+4,428'
Pictured Cliffs Ss	2,961'	2,966'	+4,214'
Total Depth (TD)*	3,161'	3,166'	+4,014'

\* all elevations reflect the ungraded ground level of 7,175'

### 2. NOTABLE ZONES

#### Oil & Gas Zones

Ojo Alamo (2,569')  
Pictured Cliffs (2,961')

#### Water Zones

San Jose (000') –

#### Coal Zones

Kirtland (2,747')

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 drilling contract has not yet been awarded, thus the exact BOP model to be used is 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

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position at all times for use when kelly is not in use.

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"	23	K-55	ST&C	New	250'
6-3/4"	4-1/2"	10.5	J-55	LT&C	New	3,161'

Surface casing will be cemented to surface with  $\approx 60$  cubic feet ( $\approx 153$  sx) Class B + 1/4#/sk Flocele + 2%  $\text{CaCl}_2$ . Volume is based on 75% excess. Three centralizers will be run. Thread lock guide shoe and bottom of float collar.

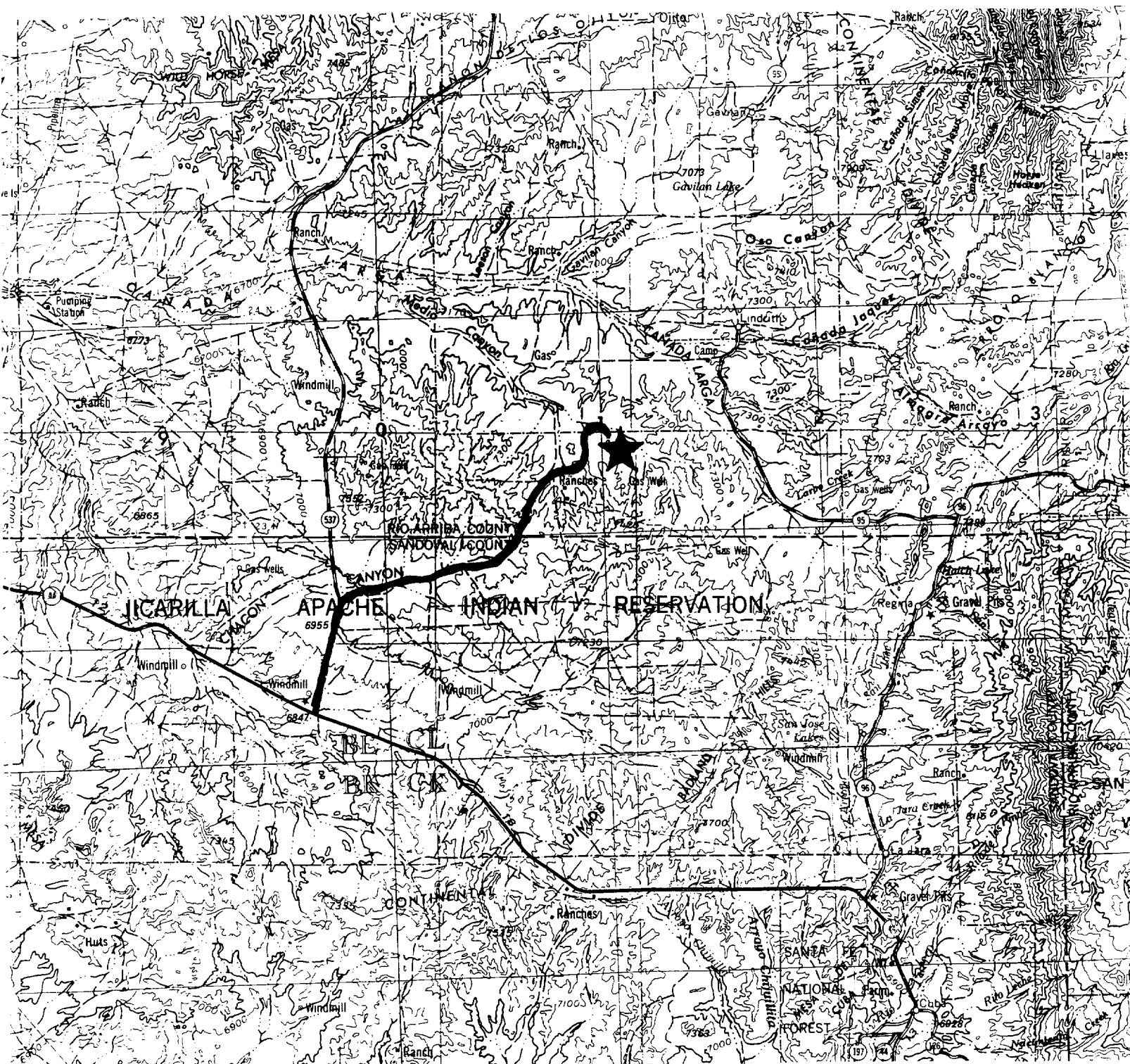
Production casing will be cemented to the surface with 824 sx ( $\approx 698$  cubic feet) Class B with 2% gel. Volume is based on 75% excess. A minimum of 10 centralizers will be used.

#### 5. MUD PROGRAM

A 9 pound polymer and fresh water mud system with a viscosity of  $\approx 35$  will be used. Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available at the well while drilling.

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PROPOSED WELL:



ACCESS ROUTE:

