Form 3160-3 (Argust 1999)

LIMITED STATES

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

DEPARTMENT OF THE BUREAU OF LAND MA	EINTERIOR STEEL	5. Lease Serial No. NMSF-078061
APPLICATION FOR PERMIT TO	DRILL OR REENTER NO	6. If Indian, Allottee or Tribe Name
la. Type of Work: DRILL REE	NTER 0 4	CARSON 33/
/ 1b. Type of Well: Oil Well Gas Well Other	Single Zone Muli	No. Lease Name and Well No. CARSON UNIT COAL 17 #1
2. Name of Operator ELM RIDGE RESOURCES, INC	c. વિદ્યાદા	9. API Well No. 3/966
3a. Address P. O. BOX 189 FARMINGTON, NM 87499	3b. Phone No. (include area code) (505) 632-3476	10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
4. Location of Well (Report location clearly and in accordance At surface 1885' FSL & 665' FW At proposed prod. zone SAME		11. Sec., T., R., M., or Blk. and Survey or Area L17-25n-11w NMPM
14. Distance in miles and direction from nearest town or post office 22 AIR MILES SOUTH OF BLOOMF		12. County or Parish 13. State NM
15. Distance from proposed* location to nearest	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
property or lease line, ft. (Also to nearest drig. unit line, if any) 665'	640	S2 = 320 ACRES
18. Distance from proposed location*	19. Proposed Depth	20. BLM/BIA Bond No. on file
to nearest well, drilling, completed, applied for, on this lease, ft. 3,038'	1,350'	#886201C (BLM - STATE WIDE)
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,420' GL	22. Approximate date work will support the UPON APPROVA	1
	24. Attachments	
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office) 	Item 20 above) 5. Operator certif 6. Such other site	ication. specific information and/or plans as may be required by the
Sl	Roger Herrera. bmitted 9-23-03. RILLING OPERATIONS AUTHORIZED ARE JBJECT TO COMPLIANCE WITH ATTACH SENERAL REQUIREMENTS".	
25. Signature	Name (Printed/Typed)	BRIAN WOOD Date 10-10-03
Title	ONE: 505 466-8120	FAX: 505 466-9682
Approved by (Signature David J. Mankiewicz	Name (Printed/Typed)	PNOV 1 3 200
Title	Office	1 101 1 0 200
Application approval does not warrant or certify the the applicant hoperations thereon. Conditions of approval, if any, are attached,	nolds legal or equitable title to those rights	in the subject lease which would entitle the applicant to condu

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

State of New Mexico Energy. Minerals & Mining Resources Department OL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT APA Number Pool Code Paal Name 0-045-31966 71629 BASIN FRUITLAND COAL Property Code Well Number Property Name CARSON UNIT COAL 17 **Bevation** Operator Name 6420 ELM RIDGE RESOURCES Surface Location County Feet from> North/South UL or Lot Top. Rga Lot lon Feet from> East/West 17 25 N. I W. 1885 WEST SAN JUAN SOUTH 665 Bottom Hole Location If Different From Surface Feet from> |North/South | Feet from> UL or Lot County Top. Rga. Lot lon East/West 392 cotion Joint ? Order Na. Consolidation NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNT HAS BEEN APPROVED BY THE DIVISION \$ 89'49' E from BLM 5269 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and 2635 betef. 0.06.48 Signature (colc) Printed Name **BRIAN WOOD** Title ш CONSULTANT ĝ. Date OCT. 10, 2003 SURVEYOR CERTIFICATION I hereby certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision. and that the 0.07 NAD 27 36 23 56.40° N 108 0159.59° W m same is true and correct to the best 665 of my belief. Date of Survey 09/05/.03 Signature and HUD A 9(69) 885 <u>6</u> 684 STERED LAND SUR

Elm Ridge Resources, Inc.
Carson Unit Coal 17 #1
1885' FSL & 665' FWL
Sec. 17, T. 25 N., R. 11 W.
San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	Sub Sea Elevation
Nacimiento	000'	5'	+6,420'
Fruitland Coal	1,000'	1,012'	+5,320'
Pictured Cliffs	1,260'	1,265'	+5,160'
Total Depth (TD)*	1,350'	1,355'	+5,070'

^{*} all elevations reflect the ungraded ground level of 6,420'

2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	Coal Zones
Fruitland Coal	Nacimiento	Fruitland
Pictured Cliffs		

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>Q. D.</u>	Weight (lb/ft)	<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	5 T & C	New	1,350'

Surface casing will be cemented to the surface with ≈ 35 cubic feet (≈ 30 sacks) Class B + 1/4 pound per sack cello flake + 2% CaCl₂. 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 ≈ 215 cubic feet (≈ 105 sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack and weight = 12.5 pounds per gallon). Tail with ≈ 125 cubic feet (≈ 105 sacks) of Class B with 2% CaCl₂ (yield = 1.18 cubic feet per sack and weight = 15.2 pounds per gallon). Total cement volume is ≥ 40 cubic feet based on 75% excess and circulating to surface.

