

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-036253
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator ELM RIDGE RESOURCES, INC.		7. If Unit or CA Agreement, Name and No. N/A 33199
3a. Address P. O. BOX 189 FARMINGTON, NM 87499	3b. Phone No. (include area code) (505) 632-3476	8. Lease Name and Well No. EW MUDGE COAL 16 #1
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1635' FSL & 950' FWL At proposed prod. zone SAME		9. API Well No. 30-045- 31967
14. Distance in miles and direction from nearest town or post office* 22 AIR MILES SOUTH OF BLOOMFIELD		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 950'	16. No. of Acres in lease 600	11. Sec., T., R., M., or Blk. and Survey or Area 16-25n-11w NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,544'	17. Spacing Unit dedicated to this well S2 = 320 ACRES	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,418' GL	19. Proposed Depth 1,350'	13. State NM
22. Approximate date work will start* UPON APPROVAL		20. BLM/BIA Bond No. on file #886201C (BLM - STATE WIDE)
23. Estimated duration 2 WEEKS		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

Comments

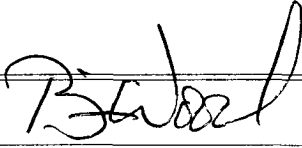

On site inspectors: Bryce Barlan & Roger Herrera.
Archaeology report CASA 03-100 submitted 9-23-03.

ER Well #: 3707
ER Lease #: 681

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

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

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

25. Signature 	Name (Printed/Typed) BRIAN WOOD	Date 10-10-03
Title CONSULTANT PHONE: 505 466-8120 FAX: 505 466-9682		
Approved by (Signature) 	Name (Printed/Typed) David J. Markiewicz	Date DEC - 4 2003
Title Office		

Application approval does not warrant or certify the 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, are attached.

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.

NMOCD

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

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 36045-31967	Pool Code 71629	Pool Name BASIN FRUITLAND COAL
Property Code 33199	Property Name EW MUDGE COAL 16	Well Number 1
OGRD No. 149052	Operator Name ELM RIDGE RESOURCES	Elevation 6418'

Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
L	16	25 N	11 W.		1635'	SOUTH	950'	WEST	SAN JUAN

Bottom Hole Location If Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
Designation 320	Joint ?	Consolidation	Order No.						

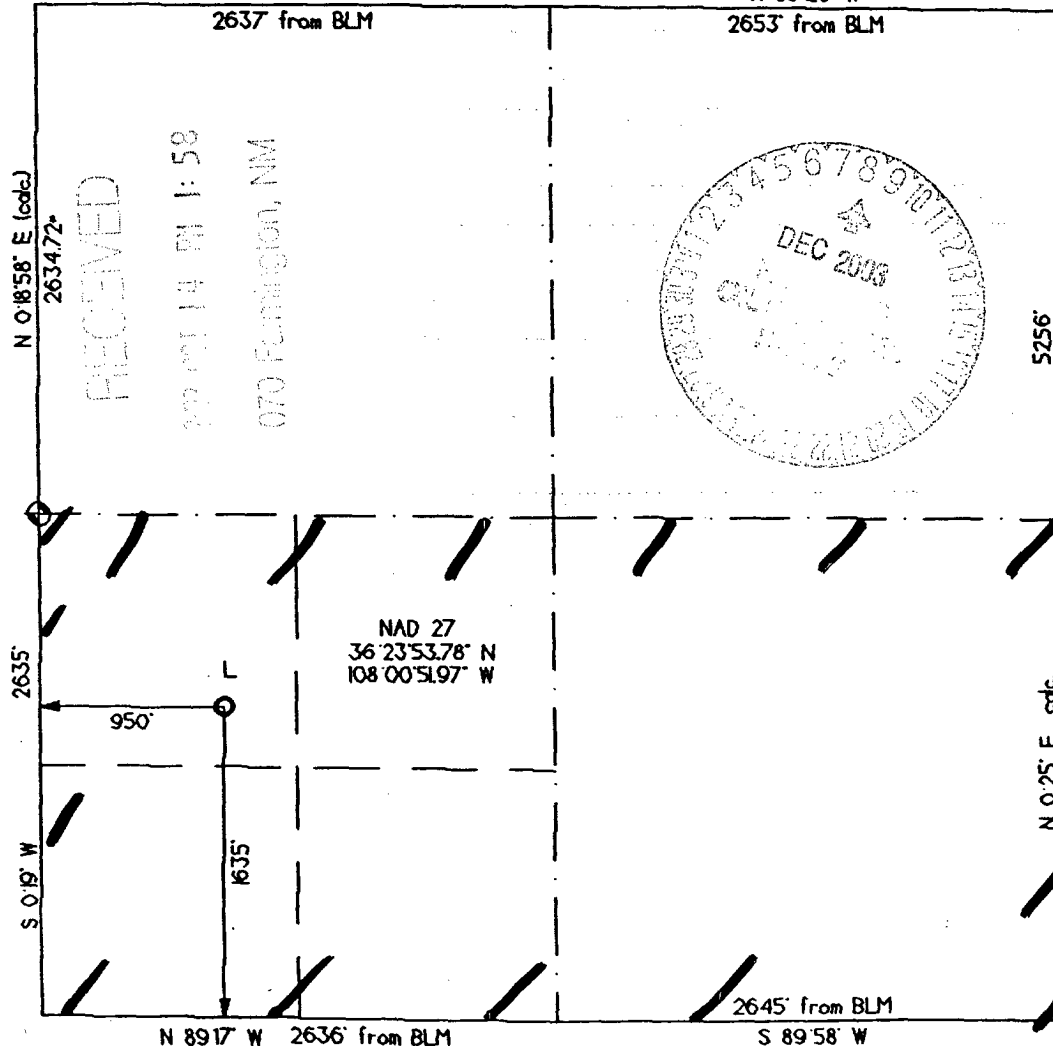
NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

N 89°39' W

N 89°23' W

2637' from BLM

2653' from BLM



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 **BRIAN WOOD**

Title **CONSULTANT**

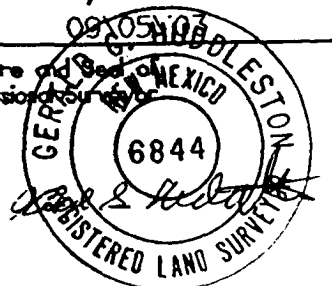
Date **OCT. 11, 2003**

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 same is true and correct to the best of my belief.

Date of Survey

Signature and Seal of Professional Surveyor



Elm Ridge Resources, Inc.
E W Mudge Coal 16 #1
1635' FSL & 950' FWL
Sec. 16, T. 25 N., R. 11 W.
San Juan County, New Mexico

PAGE 1

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'	+6,418'
Fruitland Coal	1,168'	1,173'	+5,250'
Pictured Cliffs	1,268'	1,273'	+5,150'
Total Depth (TD)*	1,350'	1,355'	+5,068'

* all elevations reflect the ungraded ground level of 6,418'

2. NOTABLE ZONES

Oil & Gas Zones

Fruitland Coal

Pictured Cliffs

Water Zones

Nacimiento

Coal Zones

Fruitland

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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PAGE 2

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	S T & C	New	120'
6-3/4"	4-1/2"	10.5	J-55	ST & 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% 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 ≈ 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% 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.