

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
NMSF-078062A

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA Agreement, Name and No.
CARSON

8. Lease Name and Well No.
CARSON UNIT COAL 18 #1

9. API Well No.
30-045- 32027

10. Field and Pool, or Exploratory
BASIN FRUITLAND COAL

11. Sec., T., R., M., or Blk. and Survey or Area
P18-25n-11w NMPM

12. County or Parish
SAN JUAN

13. State
NM

1a. Type of Work: ☒ DRILL

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator
ELM RIDGE RESOURCES, INC.

3a. Address **P. O. BOX 189
FARMINGTON, NM 87499**

3b. Phone No. (include area code)
(505) 632-3476

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface **897' FSL & 1223' FEL**

At proposed prod. zone **SAME**

14. Distance in miles and direction from nearest town or post office*
23 AIR MILES SOUTH OF BLOOMFIELD

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) **897'**

16. No. of Acres in lease
1,280.30

17. Spacing Unit dedicated to this well
S2 = 321.07 ACRES

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. **N/A**

19. Proposed Depth
1,350'

20. BLM/BIA Bond No. on file
#886201C (BLM - STATE WIDE)

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
6,416' GL

22. Approximate date work will start*
UPON APPROVAL

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:

- | | |
|---|--|
| <p>1. Well plat certified by a registered surveyor.</p> <p>2. A Drilling Plan.</p> <p>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).</p> | <p>4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).</p> <p>5. Operator certification.</p> <p>6. Such other site specific information and/or plans as may be required by the authorized officer.</p> |
|---|--|

Comments

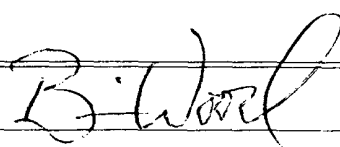
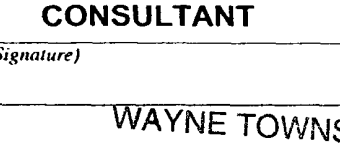
On site inspector: Bryce Barlan.
Archaeology report CASA 03-135 submitted 11-19-03.

ER Well #: 3709
ER Lease #: 733

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL 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 (&OCD), Elm (D & F)

<p>25. Signature </p> <p>Title CONSULTANT</p>	<p>Name (Printed/Typed) BRIAN WOOD</p> <p>PHONE: 505 466-8120 FAX: 505 466-9682</p>	<p>Date 11-29-03</p>
<p>Approved by (Signature) </p> <p>Title WAYNE TOWNSEND</p>	<p>Name (Printed/Typed) WAYNE TOWNSEND</p> <p>Office</p>	<p>Date 3/8/04</p>

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.

NMOC

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 30-045-32027	Pool Code 71629	Pool Name BASIN FRUITLAND COAL
Property Code 33578	Property Name CARSON UNIT COAL 18	
OGRD No. 149052	Operator Name ELM RIDGE RESOURCES	
		Well Number 1
		Elevation 6416'

Surface Location

UL or Lot	Sec.	Twp.	Rge.	Lot Lth.	Feet from	North/South	Feet from	East/West	County
P	18	25 N.	11 W.		897'	SOUTH	1223'	EAST	SAN JUAN

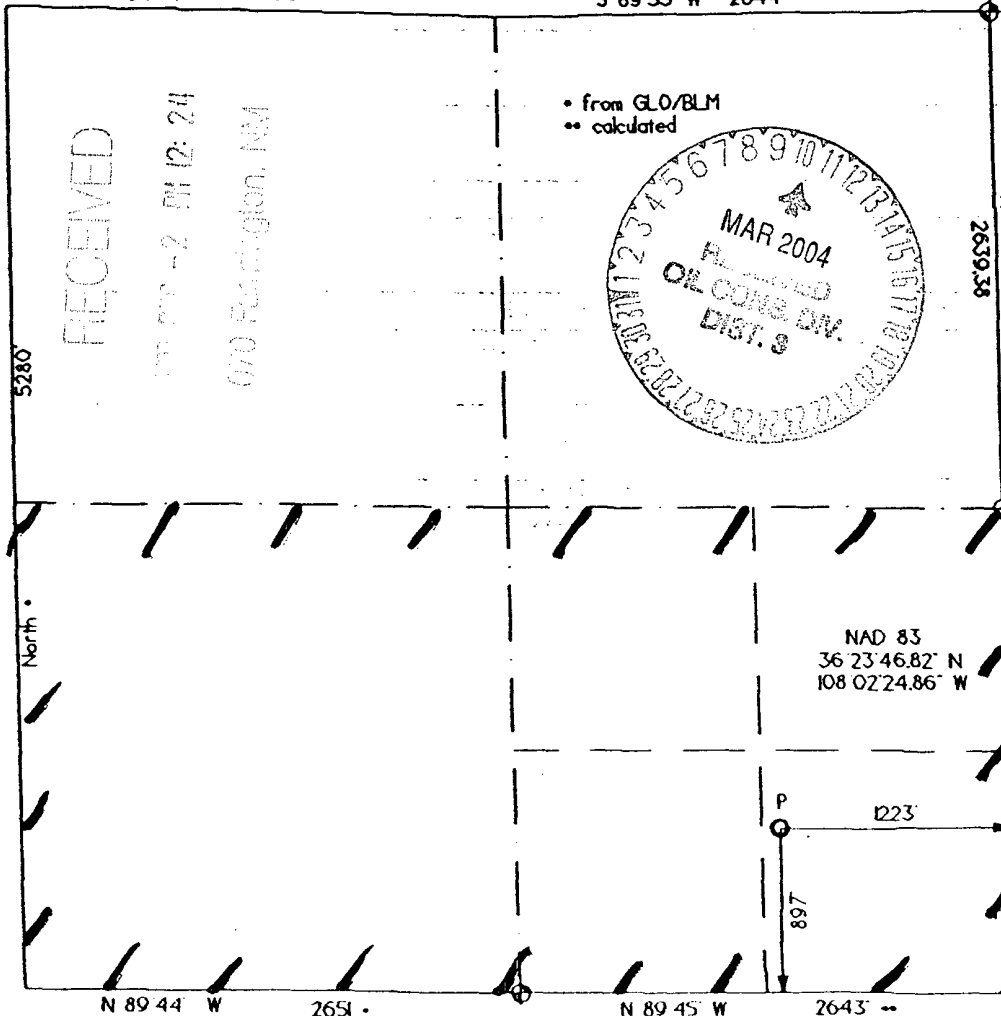
Bottom Hole Location if Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Lth.	Feet from	North/South	Feet from	East/West	County

Dedication 321.07	Joint ?	Consolidation U	Order No.
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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°04' W 2630' -- S 89°33' W 2644' • rotated -0°0742



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 **NOV. 29, 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
Brian Wood
6844
REGISTERED LAND SURVEYOR

Elm Ridge Resources, Inc.
Carson Unit Coal 18 #1
897' FSL & 1223' FEL
Sec. 18, T. 25 N., R. 11 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 Elevatio</u>
Nacimiento	000'	5'	+6,416'
Fruitland Coal	1,076'	1,081'	+5,340'
Pictured Cliffs	1,236'	1,265'	+5,180'
Total Depth (TD)*	1,350'	1,355'	+5,066'

* all elevations reflect the ungraded ground level of 6,416'

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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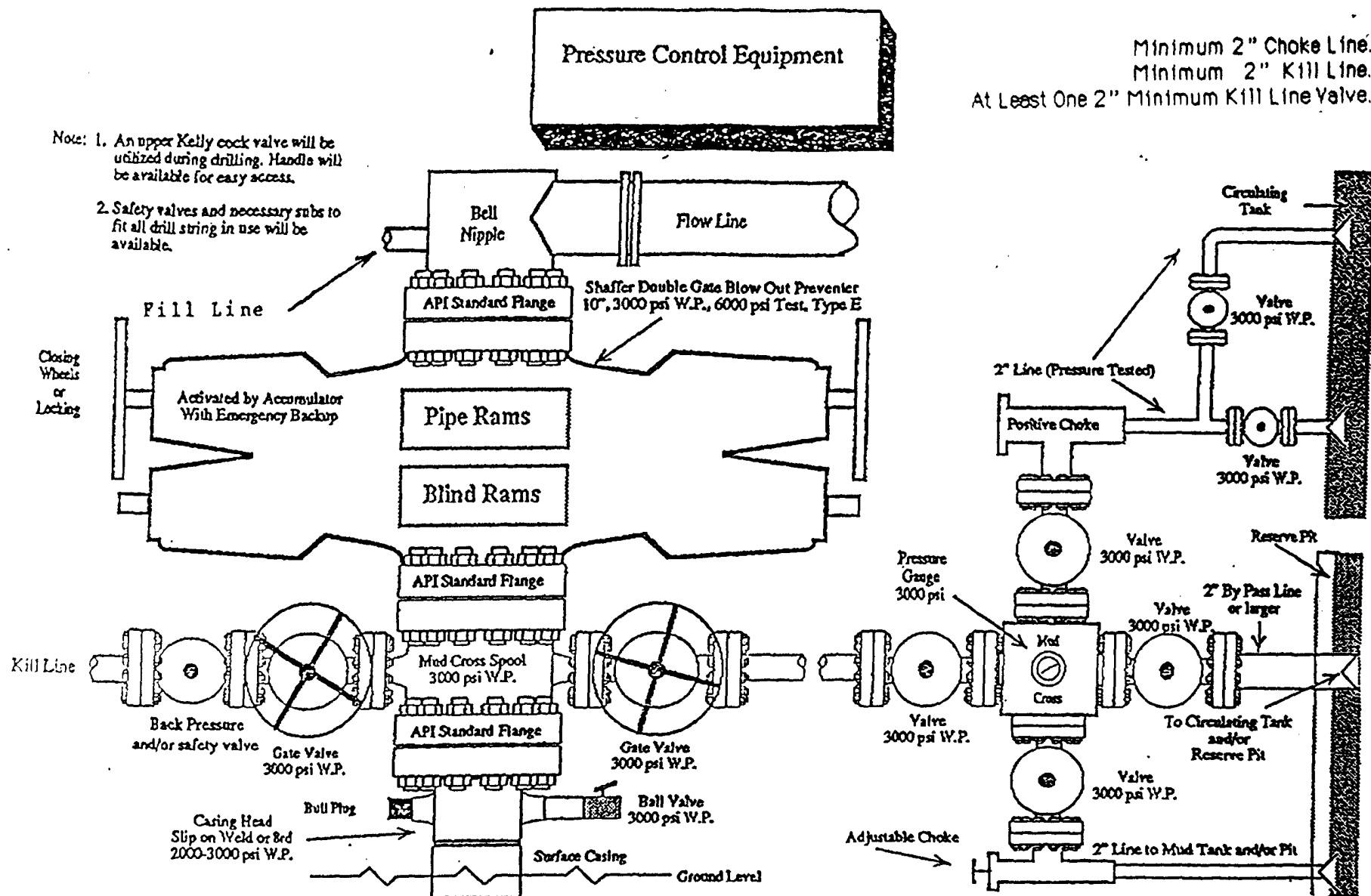
All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to assure good mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under 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	L 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% 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~~ ³⁴⁰ cubic feet based on 75% excess and circulating to surface.



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.