Form 3160-3

FORM APPROVED OMB No. 1004-0136

(August 1992) Expires November 30, 2000 **UNITED STATES** Lease Serial No. DEPARTMENT OF THE INTERIOR NMNM-061273 **BUREAU OF LAND MANAGEMENT** 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER N/A 7. If Unit or CA Agreement, Name and No. **ORILL** la. Type of Work: ☐ REENTER 070 Farmington, NM 8. Lease Name and Well No Oil Well Gas Well Other Single Zone Multiple Zone **WEST BISTI COAL 23 1-T** 1b. Type of Well: Name of Operator 9. API Well No. 30-045-**ELM RIDGE RESOURCES, INC.** 3b. Phone No. (include area code 3a. Address P. O. BOX 189 10. Field and Pool, or Exploratory (5057632-34 **FARMINGTON, NM 87499 BASIN FRUITLAND COAL** 11. Sec., T., R., M., or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State regulire At surface 972' FSL & 870' FEL *D* 23-25n-13w NMPM At proposed prod. zone SAME 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* NM 26 AIR MILES SW OF BLOOMFIELD SAN JUAN Distance from proposed* pacing Unit dedicated to this well 16. No location to nearest property or lease line, ft. 972' **E2 = 320 ACRES** (Also to nearest drig. unit line, if any) 20. BLM/BIA Bond No. on file 19. Proposed Depth Distance from proposed location* to nearest well, drilling, completed, 1,350 applied for, on this lease, ft. 2.047 #886201C (BLM - STATE WIDE) 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 6.384' GL **UPON APPROVAL** 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. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). A Drilling Plan. Operator certification. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. Comments DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED This action is subject to technical and "GENERAL REQUIREMENTS". procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 cc:BLM (&OCD), Elm (D & F), Tribe 25. Signature Name (Printed/Typed) **BRIAN WOOD** 3-7-04 Title CONSULTANT PHONE: 505 466-8120 FAX: 505 466-9682 Approved by Name (Printed/Typed) 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

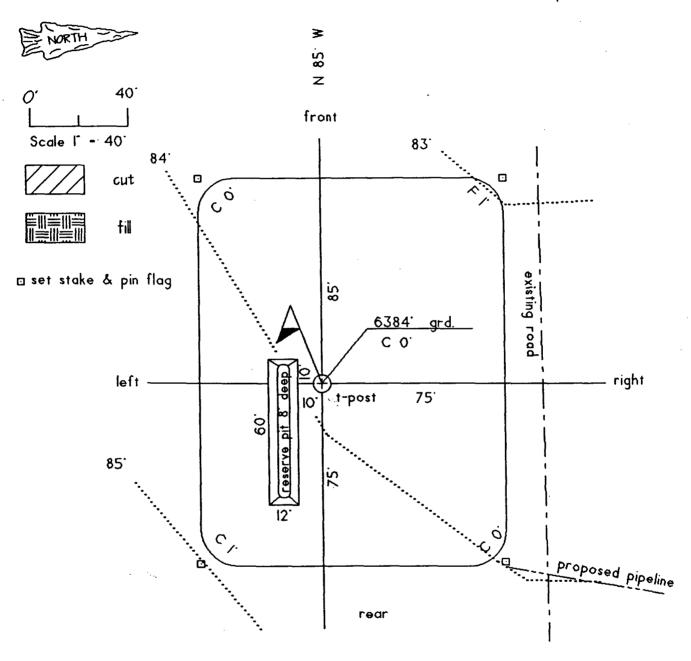
State of New Mexico Energy. Minerals & Mining Resources Department OL CONSERVATION DIVISION 2040 South Pachaco

	Santa Fe. NM 87505							MMENDED REPORT		
				WELL			CREAGE D	EDICATION		
	30-045-32223				Pool Code 71629		BASIN FI	RUITLAND	None AL	
T	Property	Property Code 77270				Property Na	me .			Wall Number
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5284' -	<u> </u>		_ :				,	·	-	SURVEYOR CERTIFICATION
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							3	6 22 55.60° N		or under my supervision, and mat it same is true and correct to the be
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West Bisti Coal I T



section

Elm Ridge Resources, Inc.
West Bisti Coal 23 1-T
972' FSL & 870' FEL
Sec. 23, T. 25 N., R. 13 W.
San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	Sub Sea Elevatio
Nacimiento	000'	5' .	+6,384'
Fruitland	1,000'	1,005'	+5,384'
Basal Fruitland Coal	1,200'	1,205'	+5,184'
Pictured Cliffs	1,260'	1,265'	+5,124'
Total Depth (TD)*	1,350'	1,355'	+5,034'

^{*} all elevations reflect the ungraded ground level of 6,384'

2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	<u>Coal Zones</u>
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

Hole Size	<u>O. D.</u>	Weight (lb/ft)	<u>Grade</u>	<u>Type</u>	<u>Age</u>	GL Setting Depth
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'

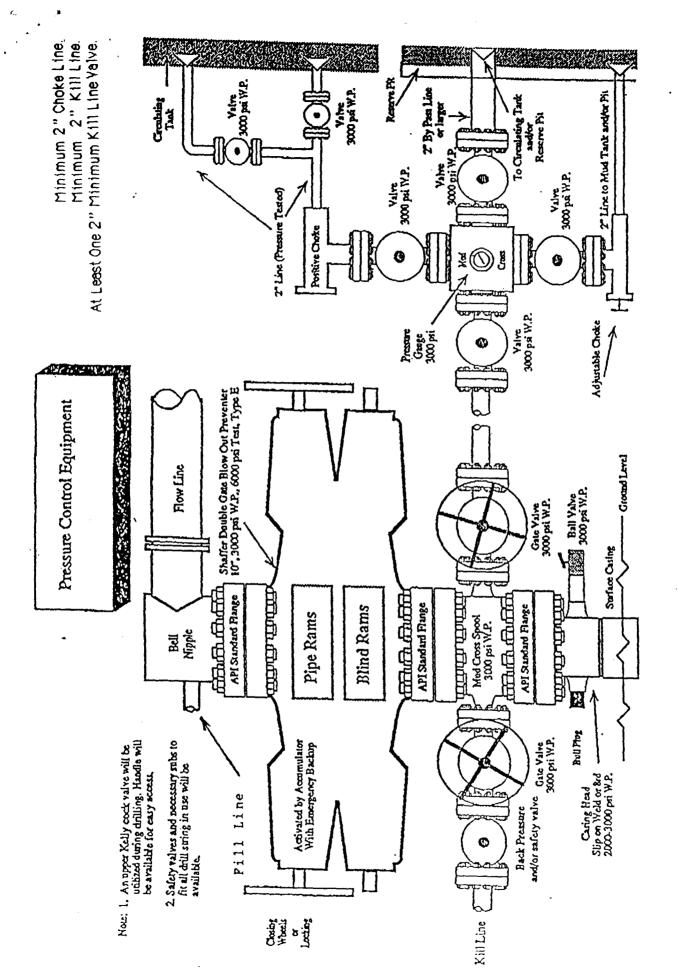
Surface casing will be cemented to the surface with ≈ 35 cubic feet (≈ 30 sacks) Class B + 1/4 pound per sack cello flake + 2% CaCl₂. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Two centralizers will be run. Thread lock guide shoe and bottom of float collar.

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 240 cubic feet based on 75% excess and circulating to surface.

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.





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 caried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.