Form 3160-3 (August 1999)

**UNITED STATES** DEPARTMENT OF THE INTERIOR

5. Lease Scrial No.

LOUM VILLEO A CO	
OMB No. 1004-0136	
Expires November 30, 2000	

BUREAU OF LAND MANA	GEMENT	NMNM-2031311
APPLICATION FOR PERMIT TO D	RILL OR REENTER	6. If Indian, Allottee or Tribe Name
APPLICATION FOR PLANIT TO D	2515 1431 .	S MH:N/A
1a. Type of Work: DRILL REENT		7. If Unit or CA Agreement, Name and No.
y Ia. Type of Work: 🗹 DRILL 🔲 REENTI		N/A
	07 <u>0</u> Fam	o. Bease traine and went to:
1b. Type of Well:  Oil Well  Gas Well  Other	Single Zone	le Zone WEST BISTI COAL 11 2#
2. Name of Operator		9. API Well No.
ELM RIDGE RESOURCES, INC.	TAIRE OF	30-045- 32094
<sup>3a.</sup> Address P. O. BOX 189	3h. Phone No. (include area code)	10. Field and Pool, or Exploratory
FARMINGTON, NM 87499	(505) 632-347	6 0 BASIN FRUITLAND COAL
4. Location of Well (Report location clearly and in accordance with	h any State requirements.*)	11. Sec., T., R., M., or Blk. and Survey or Area
At surface 1591 FSL & 1097	FEL SO	25 July 25 - 12 - 12
At proposed prod. zone SAME		11-25n-13wNMPM
14. Distance in miles and direction from nearest town or post office*	Vec Company	12. County or Parish 13. State
23 AIR MILES SW OF BLOOMFIELD		SAN JUAN / NM
15. Distance from proposed*	16. No. of Acres in lease	Spacing Unit dedicated to this well
location to nearest	- CRIN	A CONTRACTOR OF THE PROPERTY O
property or lease line, ft. (Also to nearest drig. unit line, if any)  1,049 *	960	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. 1,890	1,450	#886201C (BLM - STATE WIDE
•		•
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta	
6,346 GL	UPON APPROVAL	2 WEEKS
	24. Attachments	
The following, completed in accordance with the requirements of Onst	hore Oil and Gas Order No.1, shall be att	ached to this form:
1. Well also seed find here respicted survivous	4. Rond to cover th	e operations unless covered by an existing bond on file (see
Well plat certified by a registered surveyor.     A Drilling Plan.	Item 20 above).	e operations unless covered by an existing bond on the (see
3. A Surface Use Plan (if the location is on National Forest System La	ands, the 5. Operator certific	ation.
SUPO shall be filed with the appropriate Forest Service Office).	6. Such other site s authorized office	pecific information and/or plans as may be required by the `
Comments		
4050 1 1 1 1	1 1 0 4 0 4 7	
*350 to closest lease line an	na 1,049 to closes	st communitized area line
On site inspector: Ralph Masor		
OH SICE IHSDECTOL. NAIDH MASOL	1	

ER Well #: 3656 ER Lease #: 728

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".

1	cc:BLM (&OCD), E	lm (D & F), Trib
25. Signature Supplementary	Name (Printed/Typed) BRIAN WOOD	Date 12-31-03
CONSULTANT	PHONE: 505 466-8120 FAX: 505	466-9682
Approved by (Signature)	Name (Printed/Typed) Vayne Townsend	Date 3-3-05
Title Acting AFM	Office FFO	

Application approval dos 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.

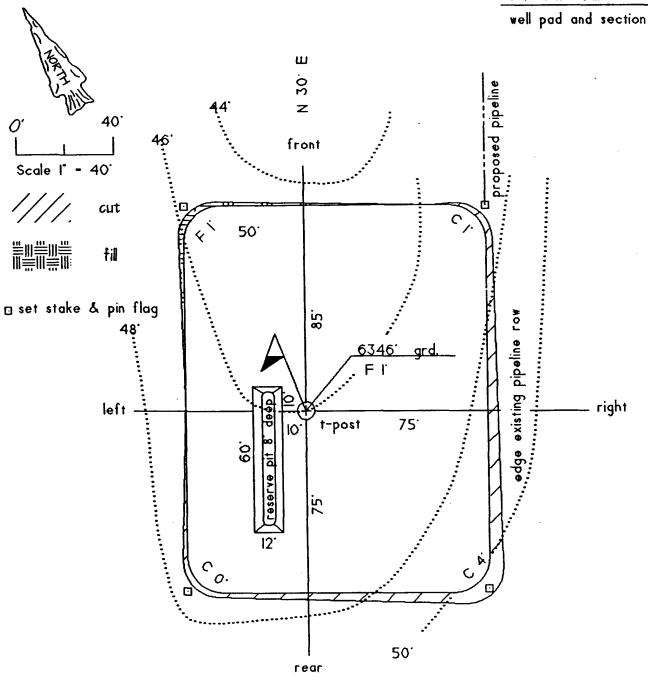
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

Santa Fe. NM 87505 MENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code 71629 BASIN FRUITLAND COAL Property Name Well Number WEST BISTI COAL II 2 T **Elevation** Operator Name 6346 ELM RIDGE RESOURCES Surface Location County Feet from> North/South Lot lan Feet from> UL or Lot Tup. Rge. East/West 25 N. 13 W. 1591 SOUTH Ю97 **EAST** SAN JUAN Battom Hole Location If Different From Surface Rga Feet from North/South | Feet from> County UL or Lat Tup. Lot lon East/West 320 cation Joint ? Order No. Consolidation NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED N 89'52' W ... OR A NON-STANDARD UNT HAS BEEN APPROVED BY THE DIMSKN OPERATOR CERTIFICATION • from GLO/BLM
•• calculated I hereby certify that the information contained herein is true and complete to the best of my knowledge and 으 belief. € Signature Printed Name BRIAN WOOD Title CONSULTANT Date DEC. 31, 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 Elm Ridge's NAD 83 same is true and correct to the best West Bisti Coal 11-2 36 24 4614 N Q of my belief. 1850 FSL & 2310 FWL 108 10 59.86° W Date of Surve API #: 30-045-28897 1097 Signature/code Profession 2640 50 ERED LAW

N 89 52" W ...

West Bisti Coal II # 2 T





Elm Ridge Resources, Inc.
West Bisti Coal 11 2-T
1591' FSL & 1097' FEL
Sec. 11, 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'	+6,346'
Basal Fruitland Coal	1,236'	1,241'	+5,110'
Pictured Cliffs	1,286'	1,291'	+5,060'
Lewis Shale	1,421'	1,426'	+4,925'
Total Depth (TD)*	1,450'	1,455'	+4,896'

<sup>\*</sup> all elevations reflect the ungraded ground level of 6,346'

### 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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West Bisti Coal 11 2-T
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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>	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	5/18C	New	1,450'

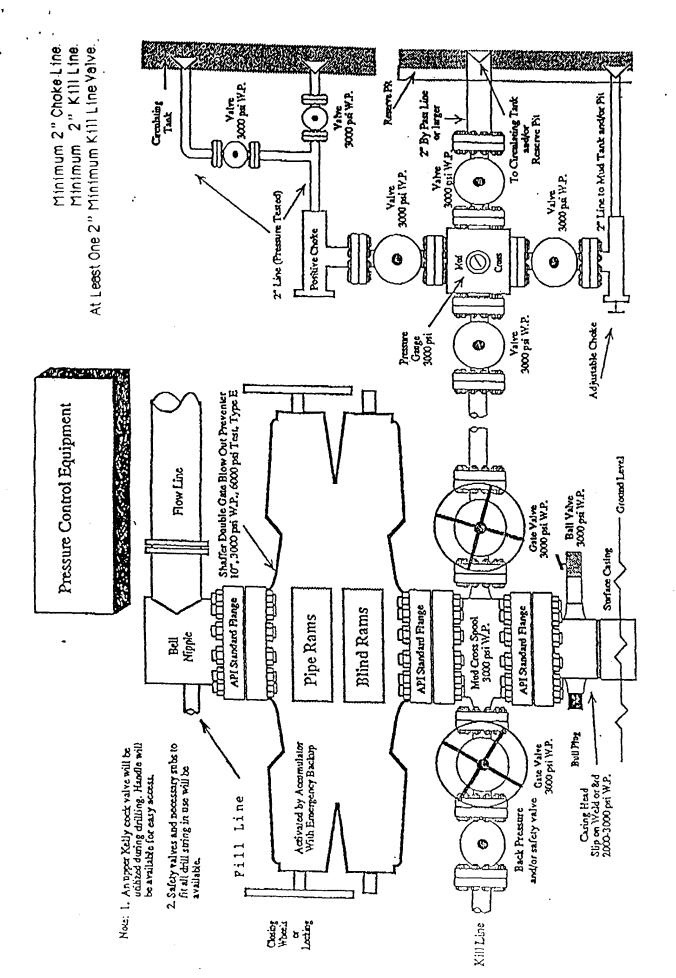
Surface casing will be cemented to the surface with  $\approx 35$  cubic feet ( $\approx 30$  sacks) Class B + 1/4 pound per sack cello flake + 2% CaCl<sub>2</sub>. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Two centralizers will be run. Thread lock guide 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. Forty barrels of fresh water will then be circulated. Lead with  $\approx 235$  cubic feet ( $\approx 115$  sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack and weight = 12.5 pounds per gallon). Tail with  $\approx 135$  cubic feet ( $\approx 115$  sacks) of Class B with 2% CaCl<sub>2</sub> (yield = 1.18 cubic feet per sack and weight = 15.2 pounds per gallon). Total cement volume is 370 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.

Elm Ridge Resources, Inc. West Bisti Coal 11 2-T 1591' FSL & 1097' FEL Sec. 11, T. 25 N., R. 13 W. San Juan County, New Mexico

No core or drill stem test is planned. DIL/GR log will be run from TD to surface. CNL/FSC log will be run over certain intervals.

### 7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be  $\leq$ 580 psi.

# 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take 5 days to drill and 1 week to complete the well.

Will communitize with NMNM-90484.

