Form 3160-3 (April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2006 MAY 12 ATT

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

5. Lease Serial No.
BIA CONTRACT 13

APPLICATION FOR PERMIT TO	DRILL OR F	REENTER R	ECEIVE RMING	6. If Indian, Allotee	or Tribe Name  APACHE NAT	TION
la. Type of work: DRILL REENT				7. If Unit or CA Agreement, Name and No. N/A		
lb. Type of Well: ☐ Oil Well	Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone			8. Lease Name and Well No.  JICARILLA 13 PC #2		
2. Name of Operator ELM RIDGE EXPLORATION COMPANY, LLC				9. API Well No. <b>039-29907</b>		
3a. Address P.O.BOX 156 BLOOMFIELD, NM 87413				10. Field and Pool, or Exploratory  BALLARD PICTURED CLIFFS		
4. Location of Well (Report location clearly and in accordance with a At surface 885' FSL & 790' FWL	ny State requirements	.*)		11. Sec., T. R. M. or I		Area
At proposed prod. zone SAME				M 26-24N-5W N	MPM	
4. Distance in miles and direction from nearest town or post office* 7 AIR MILES NE OF COUNSELOR, NM				12. County or Parish RIO ARRIBA	13. Si	tate NM
5. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)  3,430'	16. No. of acres	s in lease	17. Spacin SW4	g Unit dedicated to this	well	
8. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  305'(C 4 (DAKOTA))	19. Proposed De <b>2,600'</b>	epth	20. BLM/BIA Bond No. on file BIA NATION WIDE 886441C			
1. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,680' GL	1	e date work will sta 06/15/2006	rt*	23. Estimated duration 3 WEEKS	on .	
	24. Attachn	nents		R	CVD JAN 2	77
the following, completed in accordance with the requirements of Onshowed Well plat certified by a registered surveyor.  2. A Drilling Plan.  3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).	Lands, the 5	Bond to cover to Item 20 above).  Operator certification.	he operation cation specific info	is form:  This unless covered by an ormation and/or plans a		n file (see
25. Signature	,	rinted/Typed) IAN WOOD		·	Date 05/08/200	6
CONSULTANT	PHONE: (	(505) 466-8120	FAX	X: (505) 466-9682		
Approved by (Signagury) Mance with	Name (Pr	inted/Typed)		•	Date //S	1/20
Title AFM	Office	FF1				
Application approval does not warrant or certify that the applicant hole conduct operations thereon.	ds legal or equitabl	e title to those righ	ts in the sub	ject lease which would	entitle the applica	ntto

\*(Instructions on page 2)

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

Conditions of approval, if any, are attached.

FEB 2 3 2011

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.

DISTRICT I P.O. Box 1980, Hobbs, N.M. 88241-1980 DISTRICT II 811 South First, Artesia, N.M. 88210

N 86°58'32" W

DISTRICT III

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised Febuary (21, 1994 Instructions on back

OIL CONSERVATION DIVISION P.O. Box 2088

Submit to Appropriate District Office State Lease — 4 Copies Fee Lease — 3 Copies

### 1000 Rio Brazos Rd., Aztec, N.M. 87410 Santa Fe, NM 87504-2088 DISTRICT IV 2006 MAY 12 AM 2 55 $\square$ AMENDED REPORT 2040 South Pacheco, Santa Fe, NM 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT <sup>2</sup> Pool Code BALLARDAPICTURED CLIFFS <sup>1</sup>API Number 71439 30-039- 🔾 Well Number <sup>4</sup> Property Code <sup>5</sup>Property Name 38402 70GRID No. JICARILLA 13 PC 2 <sup>8</sup>Operator Name Elevation 149052 **ELM RIDGE EXPLORATION** 6680 <sup>10</sup> Surface Location Feet from the North/South line UL or lot no. Section Lot Idn Feet from the East/West line Township Range County 790 RIO ARRIBA 885 SOUTH WEST 26 24 N 5 W M <sup>11</sup> Bottom Hole Location If Different From Surface UL or lot no. Lot Idn Feet from the North/South line East/West line Section Township Range County 18 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. 160 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION S 87°34'57" E 5177.93' 17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief 5254.96 Signature BRIAN WOOD Printed Name CONSULTANT Title MAY 8, 2006 SECTION 26 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown 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. 8/26/05 Date of Surv 790

5172.671

Elm Ridge Exploration Company, LLC Jicarilla 13 PC 2 885' FSL & 790' FWL Sec. 26, T. 24 N., R. 5 W. Rio Arriba County, New Mexico

# **Drilling Program**

## 1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	<u>Elevation</u>
San Jose	0'	5'	+6,675'
Ojo Alamo	1,940'	1,945'	+4,735'
Kirtland	2,100'	2,105'	+4,575'
Fruitland Coal	2,275'	2,280'	+4,400'
Pictured Cliffs	2,425'	2,430'	+4,250'
Lewis Shale	2,545'	2,550'	+4,130'
Total Depth (TD)	2,600'	2,605'	+4,075'

## 2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	<u>Coal Zone</u>
Fruitland	San Jose	Fruitland
Pictured Cliffs	Ojo Alamo	

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 drilling contract has not yet been awarded, thus the exact BOP model to be used is 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



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the 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.

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</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	Setting Depth
12-1/4"	8-5/8"	24#	J <b>-</b> 55 or K-55	ST&C	New	250'
7-7/8"	5-1/2"	10.5#	J-55	LT&C	New	2,600'

Surface casing will be cemented to the surface with  $\approx\!206$  cubic feet ( $\approx\!175$  sacks) Class B with 1/4#/sk cellophane + 2% CaCl<sub>2</sub>. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Centralizers will be installed on the middle of the shoe joint and every other centralizer thereafter. Thread lock the guide shoe and bottom of float collar only. Use API casing dope.

Production casing will be cemented to the surface with  $\approx 800$  cubic feet ( $\approx 678$  sacks) Class B with 1/4#/sk cellophane + 2% CaCl<sub>2</sub>. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. About six or seven centralizers will be used.



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### 5. MUD PROGRAM

A nine pound polymer and fresh water mud system with a viscosity of ≈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.

# 6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. DIL/GR log may be run from TD to surface. CNL/FSC log may be run over certain intervals.

## 7. DOWN HOLE CONDITIONS

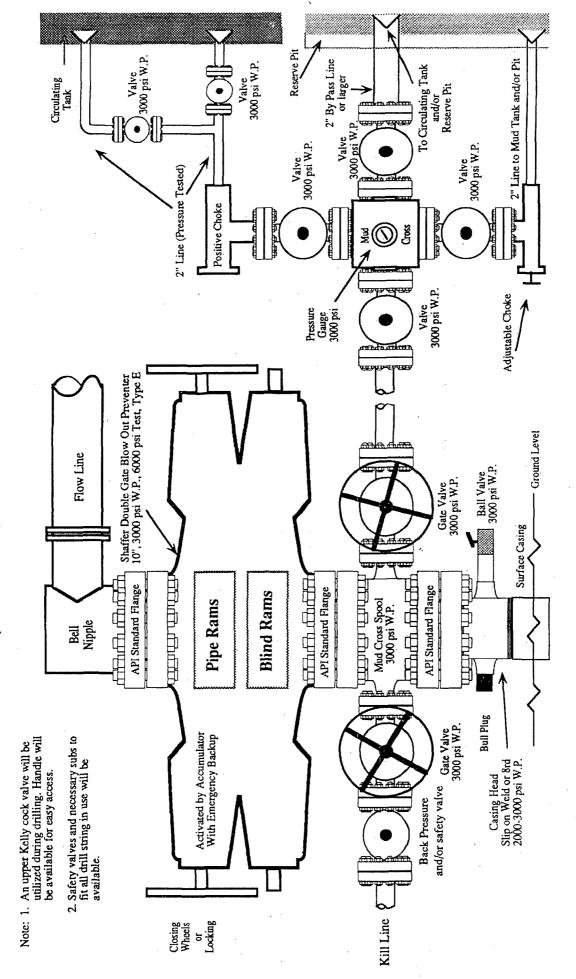
No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be  $\leq 1,040$  psi.

### 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take  $\approx 1$  week to drill and  $\approx 2$  weeks to complete the well.



# 2,000 PSI BOP SYSTEM



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.