FORM APPROVED

OMB No. 1004-0137 Expires March 31, 2007

BIA CONTRACT 361

Lease Serial No.

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MAN.		R	6 If Indian, Allotee o	r Tribe Name	
APPLICATION FOR PERMIT TO	DRILL OR REENTER	610 50	JICARILLA AI		
la. Type of work: ✓ DRILL REENTER		7 If Unit or CA Agreement, Name and No. N/A			
lb. Type of Well: ☐ Oil Well			8. Lease Name and Well No. JICARILLA APACHE J #5		
2. Name of Operator ELM RIDGE EXPLORATION COMP.			9. API Well No 30-039- 30 a	158	
3a. Address P. O. BOX 156 BLOOMFIELD, NM 87413	3b. Phone No. (include area code) (505) 632-3476		10. Field and Pool, or Exploratory BALLARD PICTURED CLIFFS		
4. Location of Well (Report location clearly and in accordance with arr	State requirements *)		11. Sec., T. R. M. or Blk	and Survey or Area	
At surface 1950' FSL & 1950' FEL At proposed prod. zone SAME			J4-23N-4W NMPM		
14. Distance in miles and direction from nearest town or post office* 12 MILES NORTHEAST OF COUNSELORS, NM			12. County or Parish RIO ARRIBA	13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. untt line, if any) 1,950'	16. No. of acres in lease 615	17. Spacin SE4	g Unit dedicated to this we	ell	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,519' (J #1)	19. Proposed Depth 3,100'		20. BLM/BIA Bond No. on file BIA NATION WIDE 886441C		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7,187' GL	22. Approximate date work will start* 23. Estimated of the start will start with the start will				
	24. Attachments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be a	ttached to the	is form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	Item 20 above). Lands, the 5. Operator certific	cation specific info	ns unless covered by an e		
25. Signature Student	Name (Printed/Typed) BRIAN WOOD		I	Date 04/28/2007	
Title	PHONE: (505) 466-8120	FAX	X; (505) 466-9682		
Approved by (Signature) Manlaele	Name (Printed/Typed)			Date 4/15/89	
Title 1 = M	Office		-	() (

Application approval does not warrant or certify that 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.

*(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.

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

APR 2 4 2009

NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3185.3 and appeal pursuant to 43 CFR 3165.4

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

DISTRICT I P.O. Box 1980, Hobbs, N.M. 88241-1980

811 South First, Artesia, N.M. 88210

1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT II

DISTRICT IV

0°24

S 89°56'03" E

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, NM 87504-2088

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

Submit to Appropriate District Office State Lease - 4 Copies
Fee Lease - 3 Copies
AM 10: 37
AMENDED REPORT

2040 South Pacheco, Santa Fe, NM 87504-2088 RECEIVED WELL LOCATION AND ACREAGE DEDICATION PLAT BLM API Number PICTURED ⁸Pool Code **CLIFFS** BALLARD 30-039-71439 Well Number Property Code ⁵Property Name 19031 JICARILLA APACHE J OGRID No. ⁸Operator Name ⁹ Elevation 149052 ELM RIDGE EXPLORATION 7187 ¹⁰ Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 1950 23 N 4 W 1950 **EAST** RIO ARRIBA J SOUTH 4 ¹¹ Bottom Hole Location If Different From Surface UL or lot no. Section Township Lot Idn Feet from the North/South line Feet from the East/West line Range County B Dedicated Acres 18 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 17 OPERATOR CERTIFICATION N 89°58'58" E 5279.64 I hereby certify that the information contained herein is 2434.20 true and complete to the best of my knowledge and belief ò 5072. Signature **BRIAN WOOD** Printed Name CONSULTANT 0°27 Title 28, 2007 APR. Date SECTION 4 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat 2629.94 was plotted from field notes of actual surveys made by me 1950' or under my supervision, and that the same is true and correct to the best of my belief. 6/28/05 Date of Survey 1 WEX Signature

,54"

Certificate Number

5248.44'

Elm Ridge Exploration Company, LLC Jicarilla Apache J #5 1950' FSL & 1950' FEL Sec. 4, T. 23 N., R. 4 W. Rio Arriba County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	GL Depth	KB Depth	<u>Elevation</u>
San Jose	0'	12'	+7,187'
Ojo Alamo	2,437'	2,449'	+4,750'
Kirtland	2,562'	2,574'	+4,625'
Fruitland	2,762'	2,774'	+4,425'
Pictured Cliffs	2,902'	2,914'	+4,285'
Lewis	2,977'	2,989'	+4,210'
Total Depth (TD)	3,100'	3,112'	+4,087'

2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	<u>Coal Zone</u>
Pictured Cliffs	San Jose	Fruitland
	Oio 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 the surface casing plug. It will remain in use until the well is completed or



Elm Ridge Exploration Company, LLC Jicarilla Apache J #5 1950' FSL & 1950' FEL Sec. 4, T. 23 N., R. 4 W. Rio Arriba County, New Mexico

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>	<u>Setting Depth</u>
12-1/4"	8-5/8"	24#	J - 55 or K-55	ST&C	New	250'
7-7/8"	5-1/2"	1 g. 5#	J - 55	LT&C	New	3,100'

Surface casing will be cemented to the surface with ≈ 206 cubic feet (≈ 175 sacks) Class B with 1/4#/sk cellophane + 2% CaCl₂. 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 ≈ 950 cubic feet (≈ 805 sacks) Class B with 1/4#/sk cellophane + 2% CaCl₂. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. Approximately eight 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

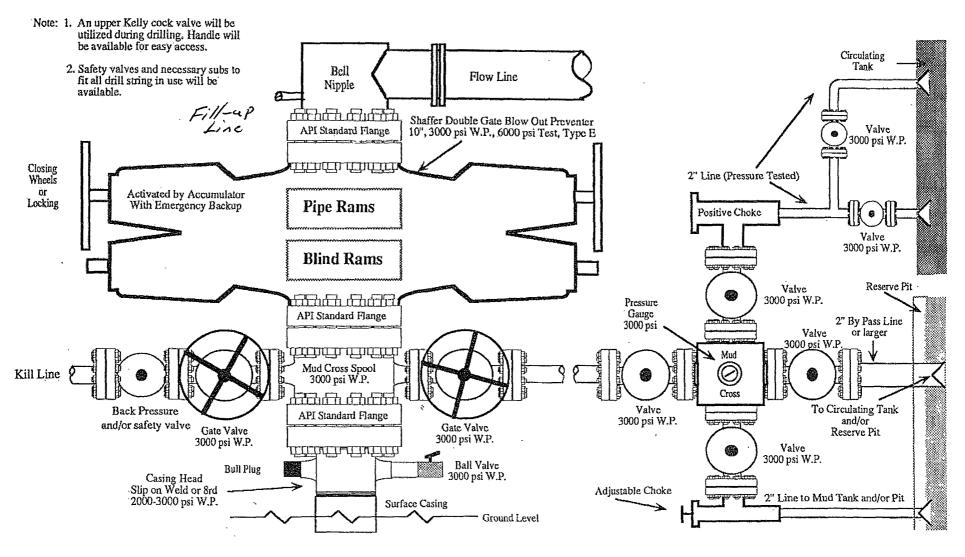
No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be $\leq 1,240$ psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take ≈ 1 week to drill and ≈ 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.