

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2007 APR 30 PM 12:50

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

RCVD APR 20 '09  
OIL CONS. DIV.  
DIST. 3

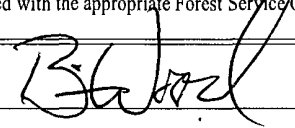
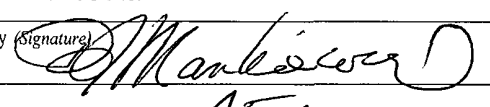
1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>BIA CONTRACT 361</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>JICARILLA APACHE</b>
2. Name of Operator <b>ELM RIDGE EXPLORATION COMPANY, LLC</b>		7. If Unit or CA Agreement, Name and No. <b>N/A</b>
3a. Address <b>P. O. BOX 156 BLOOMFIELD, NM 87413</b>	3b. Phone No. (include area code) <b>(505) 632-3476</b>	8. Lease Name and Well No. <b>JICARILLA APACHE J #4</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface <b>1005' FNL &amp; 800' FWL</b> At proposed prod. zone <b>SAME</b>		9. API Well No. <b>30-039- 30259</b>
14. Distance in miles and direction from nearest town or post office* <b>11 MILES NORTHEAST OF COUNSELORS, NM</b>		10. Field and Pool, or Exploratory <b>BALLARD PICTURED CLIFFS</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>800'</b>	16. No. of acres in lease <b>615</b>	11. Sec, T, R. M. or Blk. and Survey or Area <b>4-23N-4W NMPM</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>3,050' (J #1)</b>	19. Proposed Depth <b>3,100'</b>	12. County or Parish <b>RIO ARRIBA</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>7,157' GL</b>	22. Approximate date work will start* <b>10/10/2007</b>	13. State <b>NM</b>
23. Estimated duration <b>4 WEEKS</b>		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

25. Signature 	Name (Printed/Typed) <b>BRIAN WOOD</b>	Date <b>04/27/2007</b>
Title <b>CONSULTANT</b>	PHONE: (505) 466-8120	FAX: (505) 466-9682
Approved by (Signature) 	Name (Printed/Typed) <b>AEM</b>	Date <b>4/15/09</b>
Title <b>AEM</b>	Office <b>FFO</b>	

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)

**NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT**

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".

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.

**NMOCD**

**APR 24 2009**



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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994

DISTRICT II  
811 South First, Artesia, N.M. 88210

OIL CONSERVATION DIVISION

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

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

P.O. Box 2088  
Santa Fe, NM 87504-2088

2007 APR 30 PM 12:50

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-30259	<sup>2</sup> Pool Code 71439	<sup>3</sup> Pool Name BALLARD PICTURED CLIFFS
<sup>4</sup> Property Code 19031	<sup>5</sup> Property Name JICARILLA APACHE J	<sup>6</sup> Well Number 4
<sup>7</sup> GRID No. 149052	<sup>8</sup> Operator Name ELM RIDGE EXPLORATION	<sup>9</sup> Elevation 7157

<sup>10</sup> Surface Location

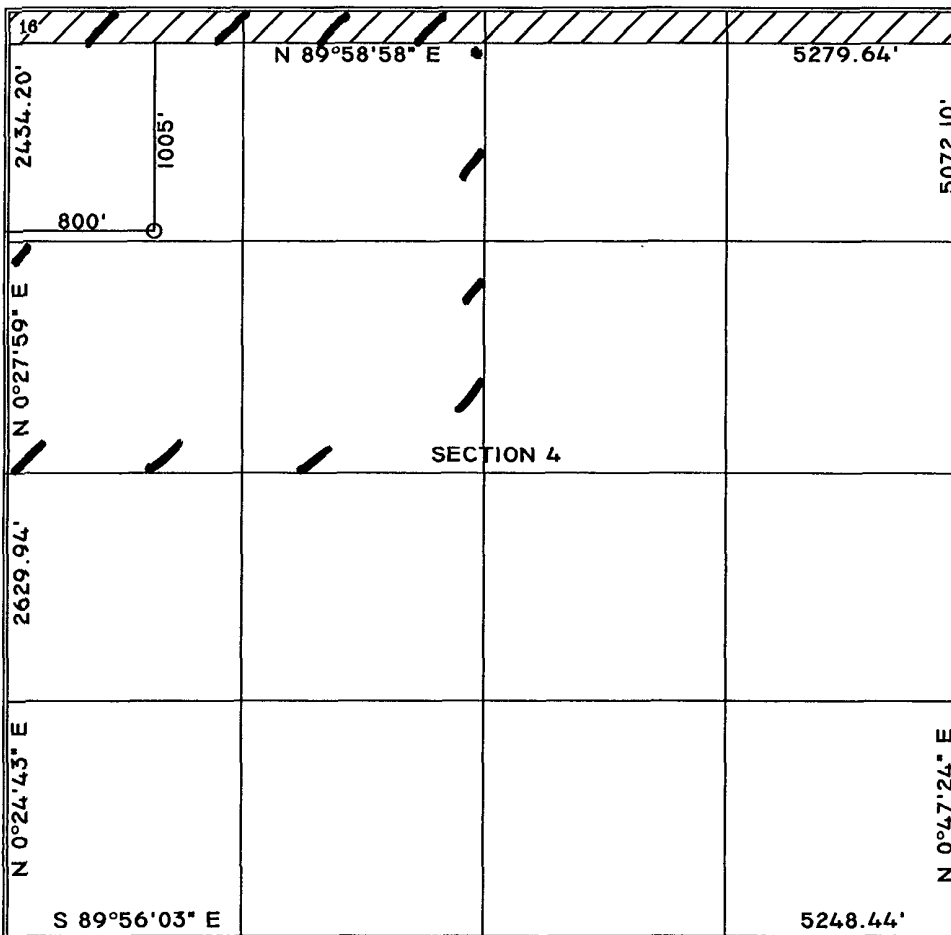
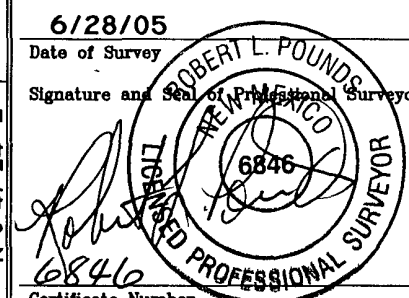
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	4	23 N	4 W		1005	NORTH	800	WEST	RIO ARRIBA

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 1.60	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
---------------------------------------	-------------------------------	----------------------------------	-------------------------

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

<sup>16</sup> 				<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature <u>Brian Wood</u> Printed Name <u>BRIAN WOOD</u> Title <u>CONSULTANT</u> Date <u>APR. 27, 2007</u>	
<sup>18</sup> 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.  Date of Survey <u>6/28/05</u> Signature and Seal of Professional Surveyor:  Certificate Number <u>6846</u>					

Elm Ridge Exploration Company, LLC  
Jicarilla Apache J #4  
1005' FNL & 800' FWL  
Sec. 4, T. 23 N., R. 4 W.  
Rio Arriba County, New Mexico

PAGE 1

## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
San Jose	0'	12'	+7,157'
Ojo Alamo	2,402'	2,414'	+4,755'
Kirtland-Fruitland	2,542'	2,554'	+4,615'
Pictured Cliffs	2,877'	2,889'	+4,280'
Lewis	2,942'	2,954'	+4,215'
Total Depth (TD)	3,100'	3,112'	+4,157'

### 2. NOTABLE ZONES

<u>Oil &amp; Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Pictured Cliffs	San Jose Ojo Alamo	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 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 <sup>250</sup>~500 psi before drilling 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

Elm Ridge Exploration Company, LLC  
Jicarilla Apache J #4  
1005' FNL & 800' FWL  
Sec. 4, T. 23 N., R. 4 W.  
Rio Arriba County, New Mexico

PAGE 2

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	S T & C	New	250'
7-7/8"	5-1/2"	10.5# 5	J-55	L T & C	New	3,100'

Surface casing will be cemented to the surface with  $\approx 206$  cubic feet ( $\approx 175$  sacks) Class B with 1/4#/sk cellophane + 2%  $\text{CaCl}_2$ . 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. *minimum 3 centralizers*

Production casing will be cemented to the surface with  $\approx 950$  cubic feet ( $\approx 805$  sacks) Class B with 1/4#/sk cellophane + 2%  $\text{CaCl}_2$ . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. Approximately eight centralizers will be used.

Elm Ridge Exploration Company, LLC  
Jicarilla Apache J #4  
1005' FNL & 800' FWL  
Sec. 4, T. 23 N., R. 4 W.  
Rio Arriba County, New Mexico

PAGE 4

#### 5. MUD PROGRAM

A nine 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.

#### 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.

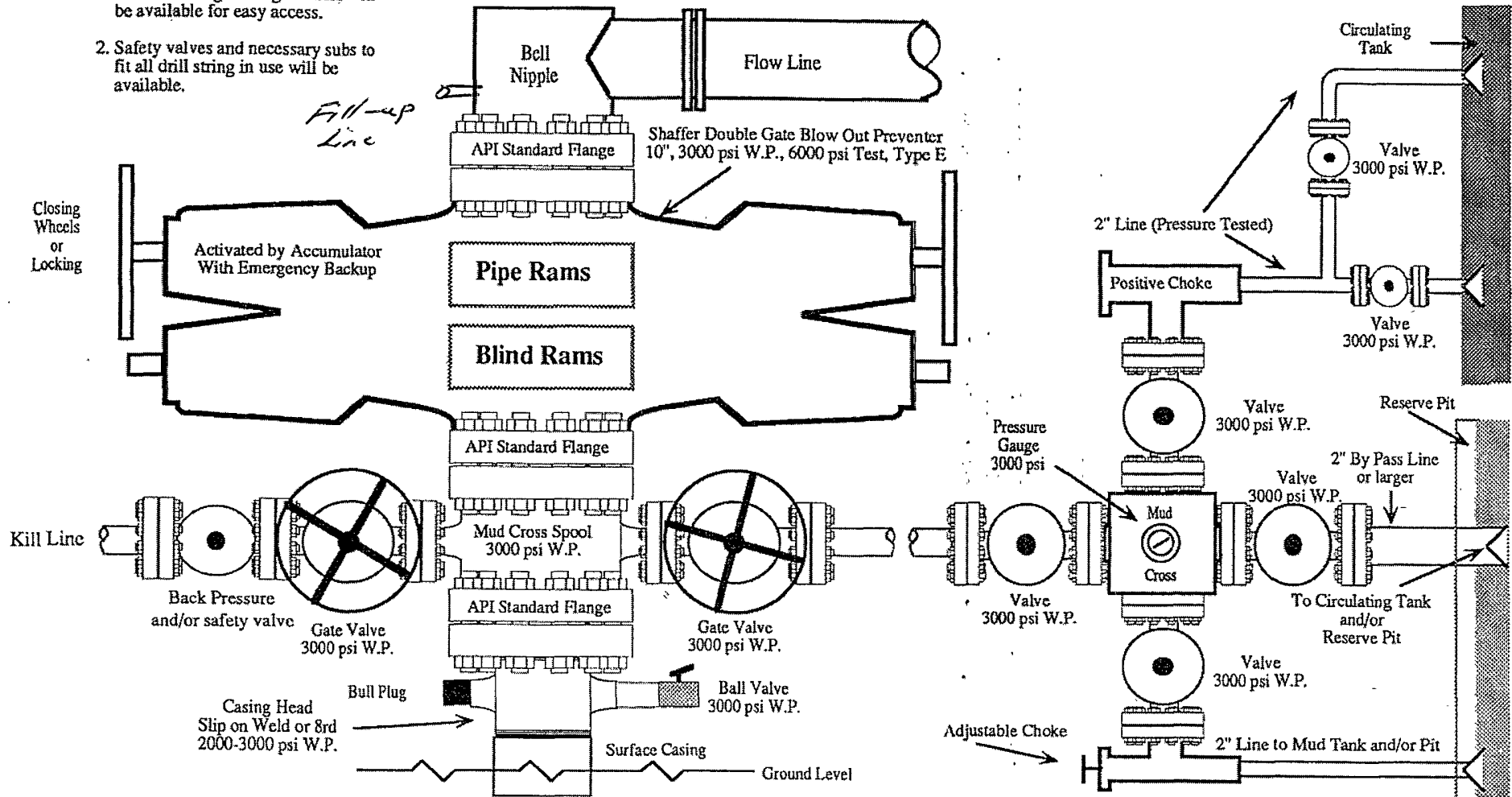
#### 8. OTHER INFORMATION

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

# 2,000 PSI BOP SYSTEM

Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.

2. Safety valves and necessary subs to fit all drill string in use will be available.



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.