Form 3160-3 (April 2004)

## UNITED STATES TIME DEPARTMENT OF THE INTERIOR

Fотп 3160 -3 (April 2004)		10 00	1 4{	FORM APPRO OMB No. 1004- Expires March 3	0137 1, 2007	
UNITED STAT DEPARTMENT OF THI BUREAU OF LAND M.			1	5. Lease Serial No. BIA CONTRACT 7	7 (200)	
APPLICATION FOR PERMIT T		RECEIVE! FENTERIGT		6. If Indian, Allotee or Tr	(2)	
la. Type of work: DRILL REED	NTER			7 If Unit or CA Agreement N/A	, Name and No.	
lb. Type of Well: Oil Well Gas Well Other	Single	Zone Multip	ole Zone	8. Lease Name and Well N JICARILLA 77 PC		
2. Name of Operator ELM RIDGE EXPLORATION CO	MPANY, LLC			9. API Well No. 30-039- 297	61	
3a. Address P. O. BOX 156 BLOOMFIELD, NM 87413	dress 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		
Location of Well (Report location clearly and in accordance with     At surface 1950' FSL & 1510' FWL     At proposed prod. zone SAME	h any State requirements.	"		11. Sec., T. R. M. or Blk.and		
14. Distance in miles and direction from nearest town or post office* 5 AIR MILES ENE OF COUNSELOR, 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. unit line, if any) 1,510'	16. No. of acres			ng Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  4,500'	19. Proposed De <b>2,300</b> '	The state of the s		BIA Bond No. on file NATION WIDE 886441C		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,648' GL	1	22. Approximate date work will start* 03/15/2006		23. Estimated duration 3 WEEKS		
	24. Attachm					
The following, completed in accordance with the requirements of On	nshore Oil and Gas Ord	er No.1, shall be a	ttached to th	nis form:	4	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	tem Lands, the	Item 20 above).  Operator certific	cation specific inf	ons unless covered by an exist formation and/or plans as may	· ·	
25. Signature		inted/Typed) IAN WOOD		Date	01/10/2006	
Title	PHONE:	(505) 466-8120	FA	X: (505) 466-9682		

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.

Office

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)

Title

54. Compliance

Name (Printed/Typed)

DEC 0 2 2010

Date



District I PO Box 1980, Hobbs, NM 88241-1980

District II PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088 State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1997
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION PO Box 2088

Santa Fe, NM <u>8</u>77504H2088 PM 1 49

AMENDED REPORT

RECEIVED

070 FARMINGTON NM WELL LOCATION AND ACREAGE DEDICATION PLAT

Property Code Property Name  TCARTLLA 77 PC	
*Property Code Property Name Well	
10000	Number
3839\ JICARILLA 77 PC	
OGRID No. Operator Name Elev	ation
149052 ELM RIDGE EXPLORATION COMPANY, LLC. 68	48'
<sup>10</sup> Surface Location	
U. or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line	County RIO
K 16 23N 5W 1950 SOUTH 1510 WEST	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
Dedicated Acres  150.0 Acres — (SW/4)  150.0 Acres — (SW/4)	
100.0 Aci CS (0N/ 4/	<u> </u>
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSC	LIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION	
5274.72' OPERATOR CERTIF	/ \ I
I hereby certify that the info contained herein is true land c to the bast-of my knowledge ar	omplete
	77
1 TAKE	K I
Signature	:
BRIAN.	WOOD_
Printed Name	TANT
Table	-I ANI
Title JAN. 10,	2006
Date	
18 SURVEYOR CERTIF	CATION
1.	
O I hereby certify that the well O shown on this plat was plotted notes of actual surveys made by	THE DE LINDSEE
notes of actual surveys made by my supervision, and that the sam and correct to the best of my tun.  LAT: 36.222602 N	e is true elief.
LAT: 36.222602 N Survey Date: SEPTEMBER	19, 2005
LAT: 36.222602 N LONG: 107.369920 W DATUM: NAD1927 Signature and Seal of Profession	al Surveyor
C. EDW	
1510'  SECON C. EDWARD  SECON MEXICO	
	b, /
15269) )	<b>m</b>
	E (
	<i>§</i> /
IN ADDRESS TOWN	/
J. J	
TAGLIC En	ARDS
5275.38 Certificate Number	15269

Elm Ridge Exploration Company, LLC Jicarilla 77 PC #1 1950' FSL & 1510' FWL Sec. 16, T. 23 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	000'	5'	+6,648'
Ojo Alamo Ss	1,498'	1,503'	+5,150'
Kirtland Shale	1,848'	1,853'	+4,800'
Pictured Cliffs Ss	2,048'	2,053'	+4,600'
Total Depth (TD)*	2,300'	2,305'	+4,348'

6 King .

### 2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	Coal Zones
Ojo Alamo	San Jose	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 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 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.



Elm Ridge Exploration Company, LLC Jicarilla 77 PC #1 1950' FSL & 1510' FWL Sec. 16, T. 23 N., R. 5 W. Rio Arriba County, New Mexico

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.

ar contact to

### 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"	23	K-55	ST&C	New	250'
6-3/4"	4-1/2"	10.5	J-55	LT&C	New	2,300'

Surface casing will be cemented to the surface with  $\approx 70$  cubic feet ( $\approx 60$  sacks) Class B with 1/4#/sk Flocele + 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  $\approx 565$  cubic feet ( $\approx 479$  sacks) Class B with 1/4#/sk Flocele + 2% CaCl<sub>2</sub>. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. At least six centralizers will be used.

### 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.



COMPANY OF PROPERTY OF

Elm Ridge Exploration Company, LLC Jicarilla 77 PC #1 1950' FSL & 1510' FWL Sec. 16, T. 23 N., R. 5 W. Rio Arriba County, New Mexico

### 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 expected bottom hole pressure will be  $\leq 920$  psi.

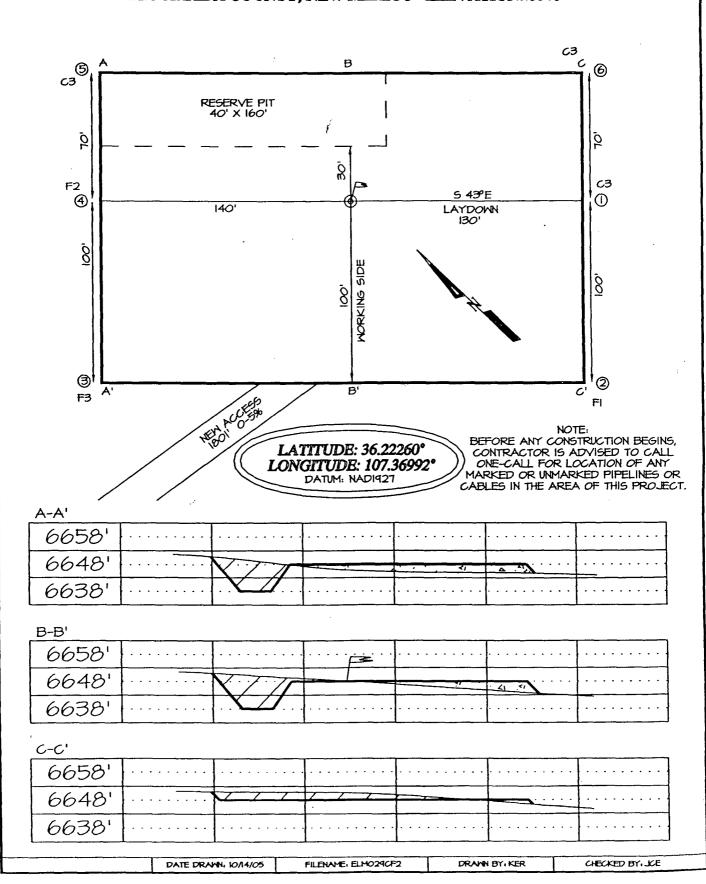
### 8. OTHER INFORMATION

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

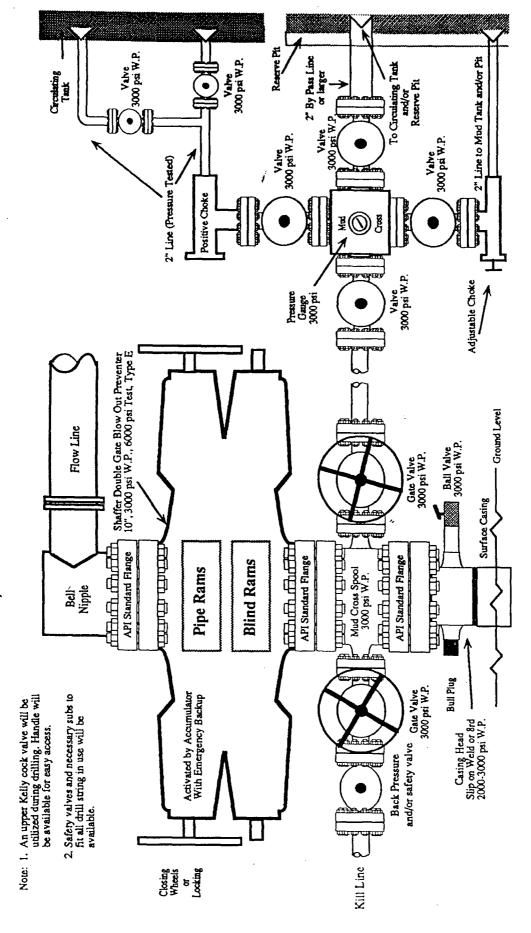


# ELM RIDGE EXPLORATION COMPANY, LLC: JICARILLA 77 PC #1 1950' FSL & 1510' FWL, SECTION 16, T23N, R5W, NMPM RIO ARRIBA COUNTY, NEW MEXICO BLEVATION: 6648'

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# 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.