

2007 MAY 7 AM 9 32

RECEIVED  
070 FARMINGTON NM

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

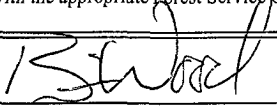
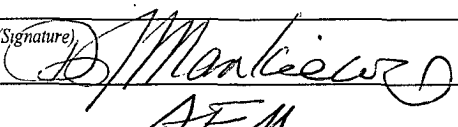
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. BIA CONTRACT 77
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name JICARILLA APACHE
2. Name of Operator ELM RIDGE EXPLORATION COMPANY, LLC		7. If Unit or CA Agreement, Name and No. N/A
3a. Address P. O. BOX 156 BLOOMFIELD, NM 87413	3b. Phone No. (include area code) (505) 632-3476	8. Lease Name and Well No. JICARILLA 77 GD #1
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1390' FSL & 1205' FWL At proposed prod. zone SAME		9. API Well No. 30-039- 30260
14. Distance in miles and direction from nearest town or post office* 5 AIR MILES NE OF COUNSELOR, NM		10. Field and Pool, or Exploratory GALLO CANYON; GALLUP/DAK
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 765'	16. No. of acres in lease 2,560	11. Sec., T. R. M. or Blk. and Survey or Area L 9-23N-5W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 141' (A-2 (PC))	19. Proposed Depth 6,600'	12. County or Parish RIO ARriba
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,618' GL	22. Approximate date work will start* 08/15/2007	13. State NM
17. Spacing Unit dedicated to this well NWSW 40		
20. BLM/BIA Bond No. on file BIA NATION WIDE 886441C		
23. Estimated duration 4 WEEKS		

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) BRIAN WOOD	Date 05/05/2007
Title CONSULTANT		
PHONE: (505) 466-8120 FAX: (505) 466-9682		
Approved by (Signature) 	Name (Printed/Typed) AEM	Date 6/24/08
Title FEO		

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.

SEE ATTACHED FOR  
NOTIFY AZ CONDITIONS OF APPROVAL  
PRIOR TO CASING & CEMENT  
24 HRS.

FIELD CHIEF FOR NSL

NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

JUL 02 2008

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

RCVD JUN 25 '08  
OIL CONS. DIV.  
DIST. 3

DISTRICT II  
811 South First, Artesia, N.M. 88210  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410  
DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 875

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

-2088 RECEIVED

070 FARMINGTON NM

State Lease - 4 Copies  
 Fee Lease - 3 Copies

AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-30260	<sup>2</sup> Pool Code 96369	<sup>3</sup> Pool Name GALLO CANYON; GALLUP/DAKOTA (oil)
<sup>4</sup> Property Code 37231	<sup>5</sup> Property Name JICARILLA 77 GD	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 149052	<sup>8</sup> Operator Name ELM RIDGE EXPLORATION	<sup>9</sup> Elevation 6618

<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
L	9	23 N	5 W		1390	SOUTH	1205	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
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<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill .	<sup>14</sup> Consolidation Code .	<sup>15</sup> Order No. .
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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

16 N 89°56'39" E  5359.90'			5281.11'
			5371.29'
SECTION 9			
LAT. 36.236270° LONG. 107.371509° NAD 83  1205'  N 0°22'31" W  S 89°55'50" E			5228.88'

**17 OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature . **BRIAN WOOD**

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Printed Name **CONSULTANT**

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Title **MAY 5, 2007**

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Date

**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.

1/03/2008

Date of Survey

NEW MEXICO

**ROBERT L. POUNDS**  
 NEW MEXICO  
 LICENSED PROFESSIONAL SURVEYOR  
 6846

Signature and Seal of Professional Surveyor:

Certificate Number

Elm Ridge Exploration Company, LLC  
Jicarilla 77 GD #1  
1390' FSL & 1205' FWL  
Sec. 9, T. 23 N., R. 5 W.  
Rio Arriba County, New Mexico

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## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
San Jose	0'	12'	+6,618'
Ojo Alamo	1,468'	1,480'	+5,150'
Pictured Cliffs	1,998'	2,010'	+4,620'
Mesa Verde	3,518'	3,530'	+3,100'
Mancos	4,368'	4,380'	+2,250'
Gallup	5,118'	5,130'	+1,500'
Semilla	5,968'	5,980'	+650'
Dakota	6,293'	6,305'	+325'
Total Depth (TD)	6,600'	6,612'	+18'

### 2. NOTABLE ZONES

<u>Oil &amp; Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Pictured Cliffs	San Jose	Fruitland
Gallup	Pictured Cliffs	
Dakota		

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

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be used is not yet known. A typical 3,000 psi model is on PAGE 3.

A  $\geq 3,000$  psi BOP and choke manifold system will be installed and tested to  $\approx 2,000$  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 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 (lb/ft)</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>Depth Set</u>
12-1/4"	8-5/8"	24	J-55 or K-55	S T & C	New	350'
7-7/8"	5-1/2"	15.5	J-55	L T & C	New	6,600'

Surface casing will be cemented to the surface with  $\approx 290$  cubic feet ( $\approx 245$  sacks) Class B with 1/4# per sack cellophane + 2%  $\text{CaCl}_2$ . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume is based on 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 in 2 stages with a stage tool set at  $\approx 4,500'$ . Centralizers will be installed on the middle of the shoe joint and on every joint thereafter for a total of  $\approx 30$  centralizers. Thread lock the guide shoe, bottom of float collar, and bottom of stage tool only.

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Jicarilla 77 GD #1  
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First stage ( $\approx 2,100'$  fill) volume will be  $\approx 651$  cubic feet consisting of  $\approx 175$  sacks Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2%  $\text{CaCl}_2$  (yield = 1.87 cubic feet per sack & weight = 12.7 pounds per gallon) followed by  $\approx 275$  sacks Class B + 2%  $\text{CaCl}_2$  (yield = 1.18 cubic feet per sack & weight = 15.2 pounds per gallon).

Second stage ( $\approx 4,500'$  fill) volume will be  $\approx 1,357$  cubic feet. Second stage will consist of  $\approx 705$  sacks of Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2%  $\text{CaCl}_2$  (yield = 1.87 cubic feet per sack & weight = 12.7 pounds per gallon) followed by  $\approx 50$  sacks Class B + 2%  $\text{CaCl}_2$  (yield = 1.18 cubic feet per sack & weight = 15.2 pounds per gallon).

Long string volume ( $\approx 2,029$  cubic feet) is based on  $\geq 75\%$  excess. A caliper log will be used to determine actual volume needed.

## 5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	<u>ppg</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>pH</u>
0' - 350'	Fresh water gel	9.0	50	NC	9
350' - TD'	Fresh water gel	9.0	38 - 50	6.0	9

Sufficient material to maintain mud qualities, control lost circulation, and prevent a blowout will be available at the well site while drilling. Mud will be checked hourly by rig personnel. Material to soak up possible oil or fuel spills will be on site.

## 6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. DIL/GR logs will be run from TD to the surface. CNL/FDC logs will be run over selected segments. Samples will be collected every  $\approx 10'$  from  $\approx 200'$  above the Point Lookout to the base of

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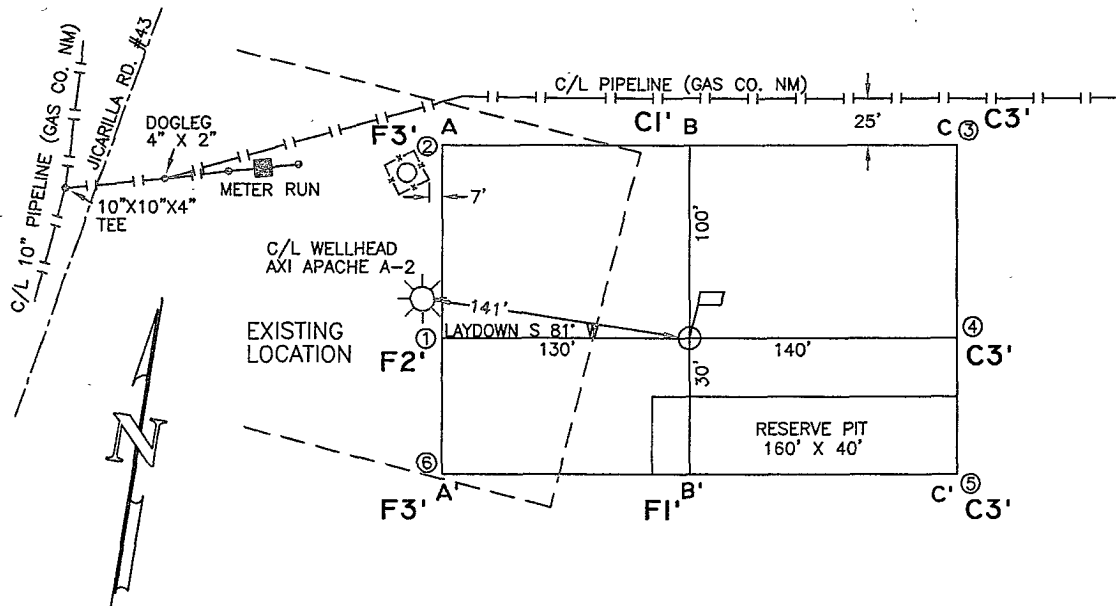
the Point Lookout and through the Gallup and Dakota. Samples will be collected every  $\approx 30'$  elsewhere.

#### 7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, or hydrogen sulfide are expected. Maximum expected bottom hole pressure will be  $\leq 2,640$  psi.

#### 8. OTHER INFORMATION

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



ELEVATION A-A'

6640				
6630				
6620				
6610				
6600				

B-B'

6640				
6630				
6620				
6610				
6600				

C-C'

6640				
6630				
6620				
6610				
6600				

LEASE: JICARILLA 77 GD #1

FOOTAGE: 1390' FSL, 1205' FWL

SEC. 9 TWN. 23 N RNG. 5 W N.M.P.M.

LATITUDE: 36.236270° LONGITUDE: 107.371509°

ELEVATION: 6618

# ELM RIDGE EXPLORATION DALLAS, TEXAS

SURVEYED: 1/03/06

REV. DATE:

APP. BY R.P.

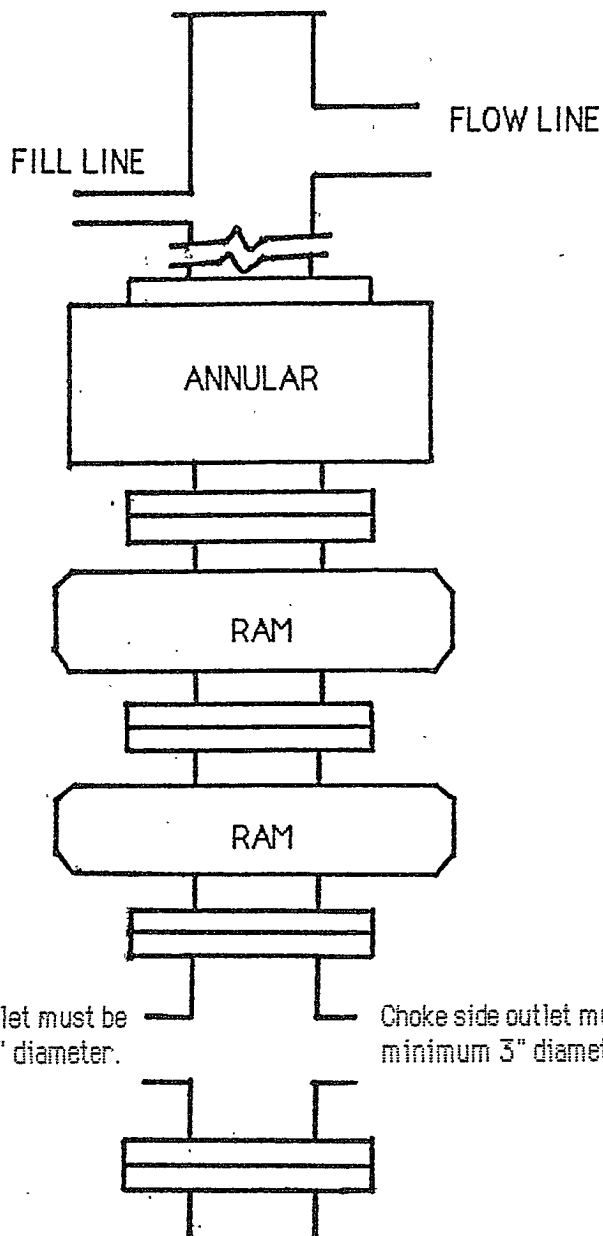
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DATE DRAWN: 1/05/06

FILE NAME: 6424C01

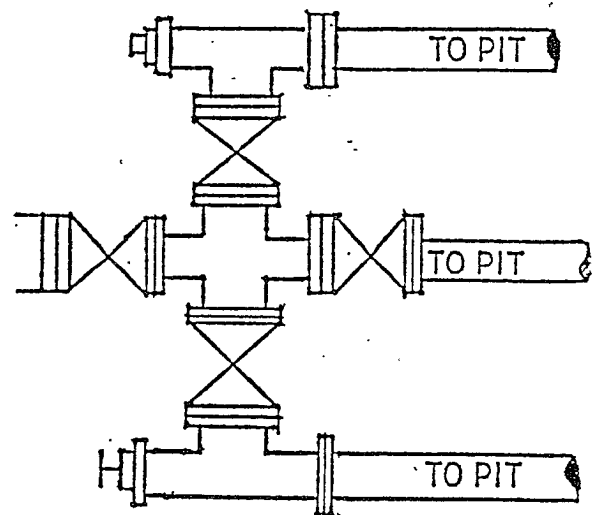


P.O. BOX 3651  
FARMINGTON, NM 87499  
OFFICE: (505) 334-0408



TYPICAL BOP STACK  
& CHOKE MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter. There will be a pressure gauge on the choke manifold.



Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

Upper kelly cock will have handle available.  
Safety valve and subs will fit all drill string connections in use.  
All BOPE connections subjected to well pressure will be flanged, welded, or clamped.