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

DEPARTMENT OF THE I BUREAU OF LAND MAN	5. Lease Serial No. BIA CONTRACT 38						
APPLICATION FOR PERMIT TO	6. If Indian, Allotee or T						
la. Type of work: DRILL REENTE		7 If Unit or CA Agreement, Name and No. N/A					
lb. Type of Well: Oil Well Gas Well Other	ole Zone	8. Lease Name and Well No. JICARILLA 38 GD #1					
2. Name of Operator ELM RIDGE EXPLORATION COMP.	<u> </u>	_	<b>———</b>	:30554			
3a. Address P. O. BOX 156 BLOOMFIELD, NM 87413	3b. Phone No. (include area code) (505) 632-3476		10. Field and Pool, or Exploratory  GALLO CANYON; GALLUP/DAK				
4. Location of Well (Report location clearly and in accordance with arr.  At surface 765' FSL & 1230' FEL  At proposed prod. zone SAME	y State requirements*)		11. Sec , T. R. M or Blk.ar  5-23N-5W NMPM	-			
14. Distance in miles and direction from nearest town or post office* 4 AIR MILES NE 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) 765'	16. No. of acres in lease  2,560	17. Spacin	ing Unit dedicated to this well				
18. Distance from proposed location* to nearest well. drilling, completed, applied for, on this lease, ft  321' (H-12 (PC))	19. Proposed Depth <b>6,700'</b>		/BIA Bond No. on file NATION WIDE 886441C				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,589' GL	22. Approximate date work will sta 06/15/2006	rt*	23. Estimated duration 4 WEEKS				
	24. Attachments						
<ol> <li>The following, completed in accordance with the requirements of Onshor</li> <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 System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	4. Bond to cover t Item 20 above).  Lands, the 5. Operator certific	he operation cation specific info	ns unless covered by an exis	·			
25. Signature	Name (Printed/Typed) BRIAN WOOD		Dat	e 05/05/2006			
Title CONSULTANT	PHONE: (505) 466-8120	FAX	K: (505) 466-9682				
Approved by (Signature)	Name (Printed/Typed)		Da	6/24/8			
Title AFN	Office FEO						
Application approval does not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	s legal or equitable title to those righ	its in the sub	ject lease which would entitl	e the applicant to			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a ci States any false, fictitious or fraudulent statements or representations as	rime for any person knowingly and to any matter within its jurisdiction.	willfully to n	nake to any department or ag	ency of the United			

A COMPLETE C-144 MUST BE SUBMITTED TO AND \*(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

MUL 0 2 2008



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

State of New Mexico Energy, Minerals & Natural Resources Department

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

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

N 89°54'49" W

Submit to Appropriate District Office

OIL CONSERVATION DIVISION DISTRICT III State Lease - 4 Copies Fee Lease - 3 Copies P.O. Box 2088 1000 Rio Brazos Rd., Aztec, N.M. 87410 Santa Fe, NM 87504-2088 2006 MAY 12 AM 2 57 DISTRICT IV □ AMENDED REPORT 2040 South Pacheco, Santa Fe, NM 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT 010 FARMINGTON POOL Name \*Pool Code GALLO CANYON: GALLUP/DAKOTA <sup>6</sup>Property Name Property Loge 37231 JICARILLA 38 GD OGRID No. Operator Name • Elevation 49052 **ELM RIDGE EXPLORATION** 6589 <sup>10</sup> Surface Location Feet from the North/South line Ul. or lot no Section Township Lot Idn Feet from the East/West line County Range 1230 RIO ARRIBA 765 **EAST** 23 N 5 W SOUTH 11 Bottom Hole Location If Different From Surface Lot Idn Feet from the North/South line Feet from the East/West line UL or let no. Section Township County 18 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No 40 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°46'29" E 5287.661 17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief 5371.82 5401 Signature **BRIAN WOOD** Printed Name CONSULTANT Title MAY 5, 2006 Date SECTION 5 18 SURVEYOR CERTIFICATION hereby certify that the well location shown on this plat vas 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 12/28/05 0,22,10 1230 Ø

5239.24

Elm Ridge Exploration Company, LLC Jicarilla 38 GD #1 765' FSL & 1230' FEL Sec. 5, T. 23 N., R. 5 W. Rio Arriba County, New Mexico

## **Drilling Program**

### 1. ESTIMATED FORMATION TOPS

<u>Formation</u>	GL Depth	KB Depth	<b>Elevation</b>
San Jose	0'	12'	+6,589'
Ojo Alamo	1,529'	1,541'	+5,060'
Pictured Cliffs Ss	2,029'	2,041'	+4,560'
Mesa Verde Ss	3,579'	3,591'	+3,010'
Mancos Shale	4,429'	4,441'	+2,160'
Gallup Ss	5,229	5,241'	+1,360'
Semilla	6,064'	6,076'	+535'
Greenhorn	6,279'	6,291'	+310'
Dakota Ss	6,364'	6,376'	+235'
Burro Canyon	6,629'	6,641'	-40'
Total Depth (TD)*	6,700'	6,712'	-111'

## 2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	<u>Coal Zones</u>
Pictured Cliffs	San Jose	Fruitland
Mesa Verde	Pictured Cliffs	Menefee
Gallup		
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.



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## 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 3,000 psi model is on PAGE 3.

A  $\geq$ 3,000 psi BOP and choke manifold system will be installed and tested to 2,000 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.

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

Hole Size	<u>O. D.</u>	Weight (lb	/ft) Grade	<u>Type</u>	<u>Age</u>	<u>Depth Set</u>
12-1/4"	8-5/8"	24	J-55 or K <b>-</b> 55	ST&C	New	350'
7-7/8"	5-1/2"	15.5	J-55	LT&C	New	6,700'

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% CaCl<sub>2</sub>. Yield = 1.18 cubic feet per sack. Weight = 1.5.2 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.



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Production casing will be cemented to the surface in 2 stages with a stage tool set at  $\approx 4,350$ '. Volumes are based on 75% excess, but caliper log will be used to determine actual volume needed. 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. Use API casing dope.

First stage ( $\approx$ 2,350' fill) volume will be  $\approx$ 722 cubic feet consisting of  $\approx$ 175 sacks Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl<sub>2</sub> (yield = 1.87 cubic feet per sack & weight = 12.7 pounds per gallon) followed by  $\approx$ 335 sacks Class B + 2% CaCl<sub>2</sub> (yield = 1.18 cubic feet per sack & weight = 15.2 pounds per gallon).

Second stage ( $\approx$ 4,350' fill) volume will be  $\approx$ 1,320 cubic feet. Second stage will consist of  $\approx$ 675 sacks of Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl<sub>2</sub> (yield = 1.87 cubic feet per sack & weight = 12.7 pounds per gallon) followed by  $\approx$ 50 sacks Class B + 2% CaCl<sub>2</sub> (yield = 1.18 cubic feet per sack & weight = 15.2 pounds per gallon).

#### 5. MUD PROGRAM

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

Sufficient material to maintain mud properties, control lost circulation, and contain 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.



Elm Ridge Exploration Company, LLC Jicarilla 38 GD #1 765' FSL & 1230' FEL Sec. 5, 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 logs will be run from TD to surface. CNL/FDC logs will be run over selected segments. Samples will be collected every  $\approx 10^{\circ}$  from  $\approx 200^{\circ}$  above the Point Lookout to the base of the Point Lookout and through the Gallup and Dakota. Samples will be collected every  $\approx 30^{\circ}$  elsewhere.

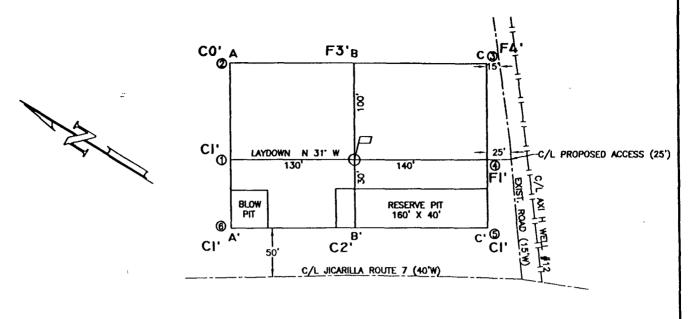
### 7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, or hydrogen sulfide are expected. Maximum expected bottom hole pressure will be  $\leq 2,680$  psi.

### 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take  $\approx$ 2 weeks to drill and  $\approx$ 10 days to complete the well.





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LEASE: JICARILLA 38 GD I

FOOTAGE: 765' FSL, 1230' FEL

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

LATITUDE: 36°14'57.6" LONGITUDE: 107°22'47.0"

ELEVATION: 6589

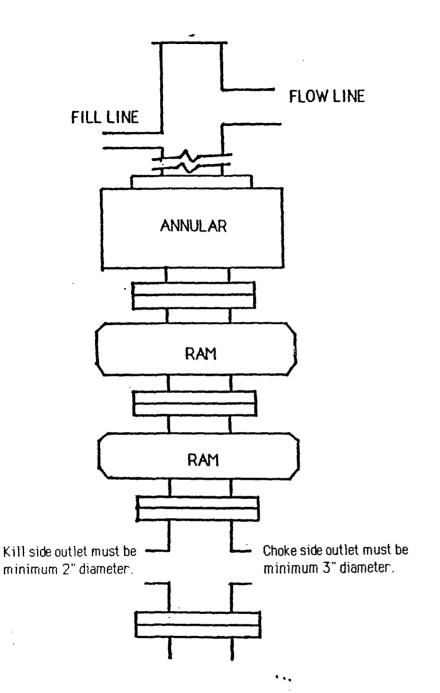
# ELM RIDGE EXPLORATION DALLAS, TEXAS

	12/28/05	DATE DRAWN: 1/02/06	APP. BY R.P.
DRAWN BY:	A.U.	DATE DRAWN: 1/02/06	FILE NAME: 6406CUT



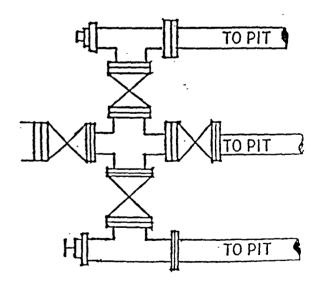
P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505) 334-0408

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# 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

