

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

RECEIVED
JUL 16 2008
BIA CONTRACT 40

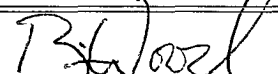
2008 JUL 16

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. BIA CONTRACT 40
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" 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 40 GD #3
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1750' FSL & 1730' FEL At proposed prod. zone SAME		9. API Well No. J 30-039-30248
14. Distance in miles and direction from nearest town or post office* 6 MILES NORTHEAST OF COUNSELORS, NM		10. Field and Exploratory Basin Marces & BAS. DAKOTA
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 890'	16. No. of acres in lease 2,560	11. Sec., T. R. M. or Blk. and Survey or Area 35-24N-5W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,532' (D #4)	19. Proposed Depth 7,000'	12. County or Parish RIO ARriba
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,787' GL	22. Approximate date work will start* 09/01/2007	13. State NM
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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 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 04/12/2007
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Title CONSULTANT	PHONE: (505) 466-8120	FAX: (505) 466-9682
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Approved by (Signature) Original Signed: Stephen Mason	Name (Printed/Typed)	Date JUL 16 2008
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Title	Office
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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 NMOC FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOC PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

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



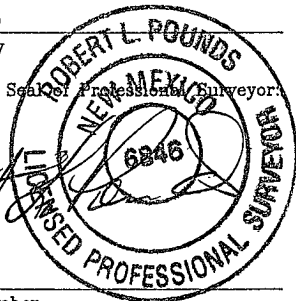
NMOC

JUL 24 2008

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

This action is subject to technical and procedural review pursuant to 43 CFR 3165.8 and appeal pursuant to 43 CFR 3165.4

☐ AMENDED REPORT

16 S 86°58'32" E 5292.14'			5172.67'		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <div style="text-align: center;">  <hr/> Signature <hr/> Printed Name <div style="text-align: center;">BRIAN WOOD</div> <hr/> Title <div style="text-align: center;">CONSULTANT</div> <hr/> Date <div style="text-align: center;">APR. 12, 2007</div> <hr/> </div>
SECTION 35					
N 0°12'02" W N 86°35'02" W		1750'	1730'	S 0°18'24" E 5184.65'	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. <div style="text-align: center;"> 12/7/05 <hr/> Date of Survey <hr/> Signature and Seal of Professional Surveyor <div style="text-align: center;">  6846 <hr/> Certificate Number </div> </div> <div style="text-align: center;">  </div>

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

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 87504-2088

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 February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

2007 APR 16 PM 12:41

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30248	² Pool Code 48450 97232	³ Pool Name OTERO GALLUP Basin Mancos
⁴ Property Code 37265	⁵ Property Name JICARILLA 40 GD	⁶ Well Number 3
⁷ GRID No. 149052	⁸ Operator Name ELM RIDGE EXPLORATION	⁹ Elevation 6787

¹⁰ Surface Location

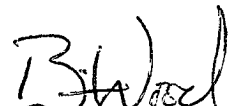
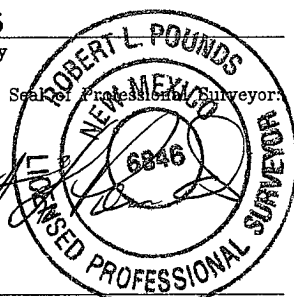
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	35	24 N	5 W		1750	SOUTH	1730	EAST	RIO ARriba

¹¹ 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

¹² D. Acreage 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

¹⁶ S 86°58'32" E 5292.14'			5172.67'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Printed Name BRIAN WOOD Title CONSULTANT Date APR. 12, 2007
				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. 12/7/05 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number 6846
		SECTION 35		
			1730'	
			1750'	
N 0°12'02" W N 86°35'02" W			5184.65'	

Elm Ridge Exploration Company, LLC
 Jicarilla 40 GD #3~~30~~
 1750' FSL & 1750' FEL
 Sec. 35, T. 24 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'	+6,787'
Ojo Alamo	1,917'	1,929'	+4,870'
Kirtland	2,067'	2,079'	+4,720'
Fruitland Coal	2,387'	2,399'	+4,400'
Pictured Cliffs	2,412'	2,424'	+4,375'
Lewis	2,587'	2,599'	+4,200'
Gallup	5,512'	5,524'	+1,275'
Dakota	6,712'	6,724'	+75'
Morrison	6,937'	6,949'	-150'
Total Depth (TD)	7,000'	7,012'	-213'

2. NOTABLE ZONES

<u>Oil & 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.

Elm Ridge Exploration Company, LLC
Jicarilla 40 GD #3 ~~30~~
1750' FSL & 1750' FEL
Sec. 35, T. 24 N., R. 5 W.
Rio Arriba County, New Mexico

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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 $\approx 2,000$ 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	7,000'

Surface casing will be cemented to the surface with ≈ 290 cubic feet (≈ 245 sacks) Class B with 1/4# per sack cellophane + 2% 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.

Elm Ridge Exploration Company, LLC
Jicarilla 40 GD #3 30
1750' FSL & 1750' FEL
Sec. 35, T. 24 N., R. 5 W.
Rio Arriba County, New Mexico

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Production casing will be cemented to the surface in two stages with a stage tool set at $\approx 5,000'$. Volumes are based on $\approx 75\%$ excess, but a 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 ≈ 33 centralizers. Thread lock the guide shoe, bottom of float collar, and bottom of stage tool only. Use API casing dope.

First stage ($\approx 2,000'$ fill) volume will be ≈ 615 cubic feet consisting of ≈ 165 sacks Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl_2 (yield = 1.87 cubic feet per sack & weight = 12.7 pounds per gallon) followed by ≈ 260 sacks Class B + 2% CaCl_2 (yield = 1.18 cubic feet per sack & weight = 15.2 pounds per gallon).

Second stage ($\approx 5,000'$ fill) volume will be $\approx 1,525$ cubic feet. Second stage will consist of ≈ 785 sacks of Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl_2 (yield = 1.87 cubic feet per sack & weight = 12.7 pounds per gallon) followed by ≈ 50 sacks Class B + 2% CaCl_2 (yield = 1.18 cubic feet per sack & weight = 15.2 pounds per gallon).

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.

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Jicarilla 40 GD #3 ~~30~~
1750' FSL & 1750' FEL
Sec. 35, T. 24 N., R. 5 W.
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6. CORES, TESTS, & LOGS

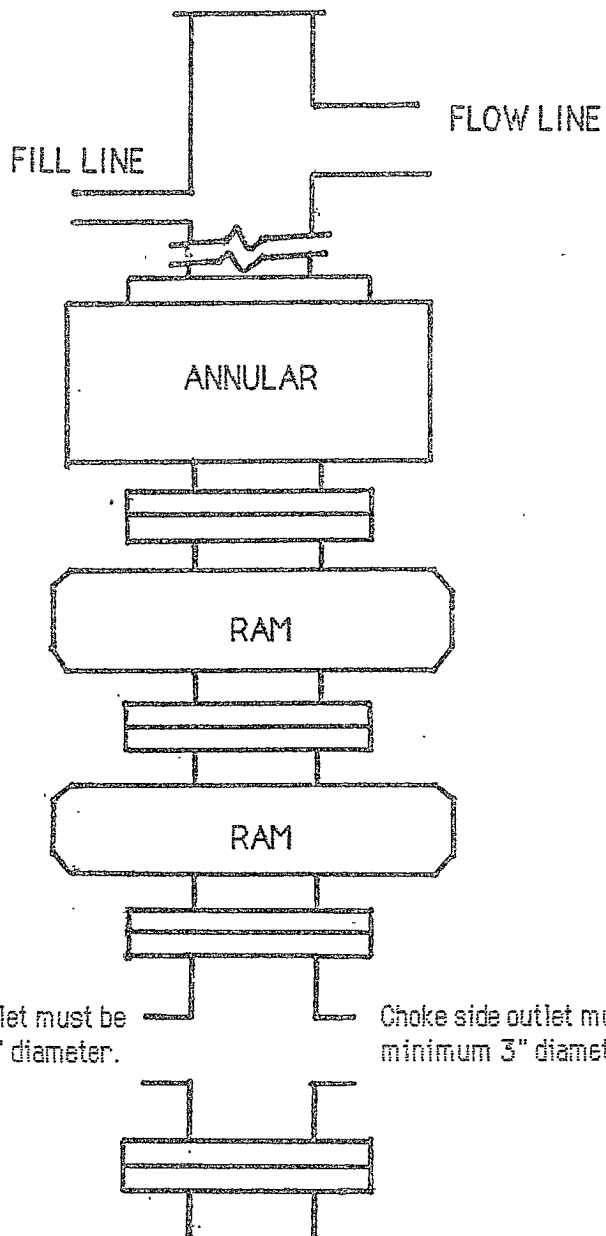
No cores or drill stem tests are planned. DIL/GR logs will be run from TD to the surface. CNL/FDC logs will be run over selected segments. Samples will be collected every $\approx 10'$ from $\approx 200'$ above the Point Lookout to the base of the Point Lookout and through the Gallup and Dakota. Samples 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 $\leq 2,800$ psi.

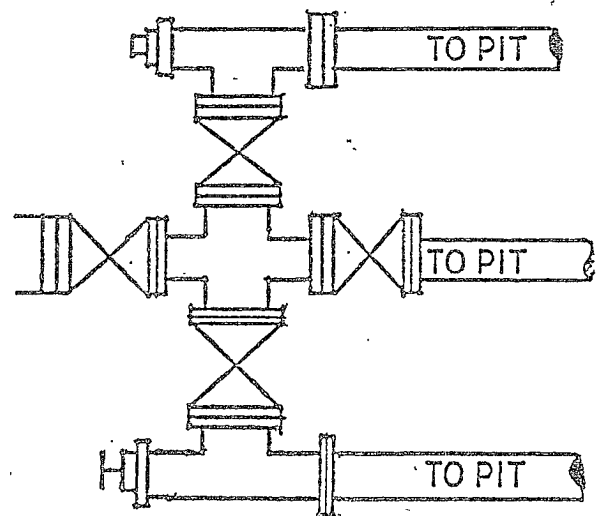
8. OTHER INFORMATION

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



TYPICAL BOP STACK
& CHOKE MANIFOLD
3M system

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.