

RECEIVED

Form 3160-3
(April 2004)

FEB 06 2006

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007UNITED 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 78
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 JICARILLA APACHE NATION
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 78 PC #1
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 700' FSL & 1190' FWL At proposed prod. zone SAME		9. API Well No. 30-039- 29791
14. Distance in miles and direction from nearest town or post office* 7 AIR MILES NE OF COUNSELOR, NM		10. Field and Pool, or Exploratory BALLARD PICTURED CLIFFS
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 4,090'	16. No. of acres in lease 2,560	11. Sec., T. R. M. or Blk. and Survey or Area M 12-23N-5W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,199' (#4)	19. Proposed Depth 2,500'	12. County or Parish RIO ARRIBA
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,803' GL	22. Approximate date work will start* 04/15/2006	13. State NM
17. Spacing Unit dedicated to this well SW4		
20. BLM/BIA Bond No. on file BIA NATION WIDE 886441C		
23. Estimated duration 3 WEEKS		

24. Attachments

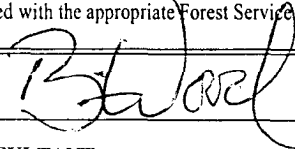
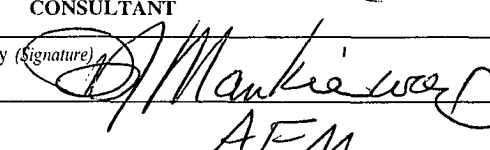
RCVD MAR 29 '11

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

OIL CONS. DIV.

- | | |
|---|--|
| 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. |

DIST. 3

25. Signature 	Name (Printed/Typed) BRIAN WOOD	Date 02/04/2006
Title CONSULTANT	PHONE: (505) 466-8120	FAX: (505) 466-9682
Approved by (Signature) 	Name (Printed/Typed)	Date 3/17/11
Title AFM	Office FFO	

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)

HOLD C104 FOR 5.9 Compliance

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.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

APR 07 2011

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

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

 NMOCD

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

OIL CONSERVATION DIVISION
PO 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29791		*Pool Code 71439	*Pool Name BALLARD PICTURED CLIFFS
*Property Code 38100	*Property Name JICARILLA 78 PC		*Well Number 1
*GRID No. 149052	*Operator Name ELM RIDGE EXPLORATION COMPANY, LLC.		*Elevation 6803'

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
M	12	23N	5W		700	SOUTH	1190	WEST	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 Dedicated Acres 160.0 Acres - (SW/4)					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

<div><p>15</p><p>5272.08'</p><p>5280.00'</p><p>12</p><p>5270.10'</p><p>LAT: 36.232772°N LONG: 107.317871°W DATUM: NAD1927</p><p>1190'</p><p>100'</p></div>	<div><p>¹⁷ OPERATOR CERTIFICATION</p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p><p><i>Brian Wood</i></p><p>Signature BRIAN WOOD</p><p>Printed Name CONSULTANT</p><p>Title FEB. 4, 2006</p><p>Date</p></div>
	<div><p>¹⁸ SURVEYOR CERTIFICATION</p><p>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.</p><p>Date of Survey: JUNE 21, 2005</p><p>Signature and Seal of Professional Surveyor</p><div><p>JASON C. EDWARDS</p><p>NEW MEXICO</p><p>15269</p><p>REGISTERED PROFESSIONAL SURVEYOR</p></div><p>JASON C. EDWARDS</p><p>Certificate Number 15269</p></div>

Elm Ridge Exploration Company, LLC
Jicarilla 78 PC #1
700' FSL & 1190' FWL
Sec. 12, T. 23 N., R. 5 W.
Rio Arriba County, New Mexico

PAGE 1

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
San Jose	000'	5'	+6,803'
Ojo Alamo Ss	1,803'	1,808'	+5,000'
Kirtland Shale	2,103'	2,108'	+4,700'
Pictured Cliffs Ss	2,303'	2,308'	+4,500'
Total Depth (TD)*	2,500'	2,505'	+4,303'

2. NOTABLE ZONES

Oil & Gas Zones

Ojo Alamo
Pictured Cliffs

Water Zones

San Jose
Ojo Alamo

Coal Zone

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 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 78 PC #1
700' FSL & 1190' FWL
Sec. 12, T. 23 N., R. 5 W.
Rio Arriba County, New Mexico

PAGE 2

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>GL Setting Depth</u>
8-5/8"	7"	23	K-55	ST & C	New	250'
6-3/4"	4-1/2"	10.5	J-55	ST & C ST	New	2,400'

Surface casing will be cemented to the surface with ≈ 70 cubic feet (≈ 60 sacks) Class B with 1/4#/sk Flocele + 2% 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.

Production casing will be cemented to the surface with ≈ 615 cubic feet (≈ 521 sacks) Class B with 1/4#/sk Flocele + 2% CaCl_2 . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. At least six centralizers will be used.

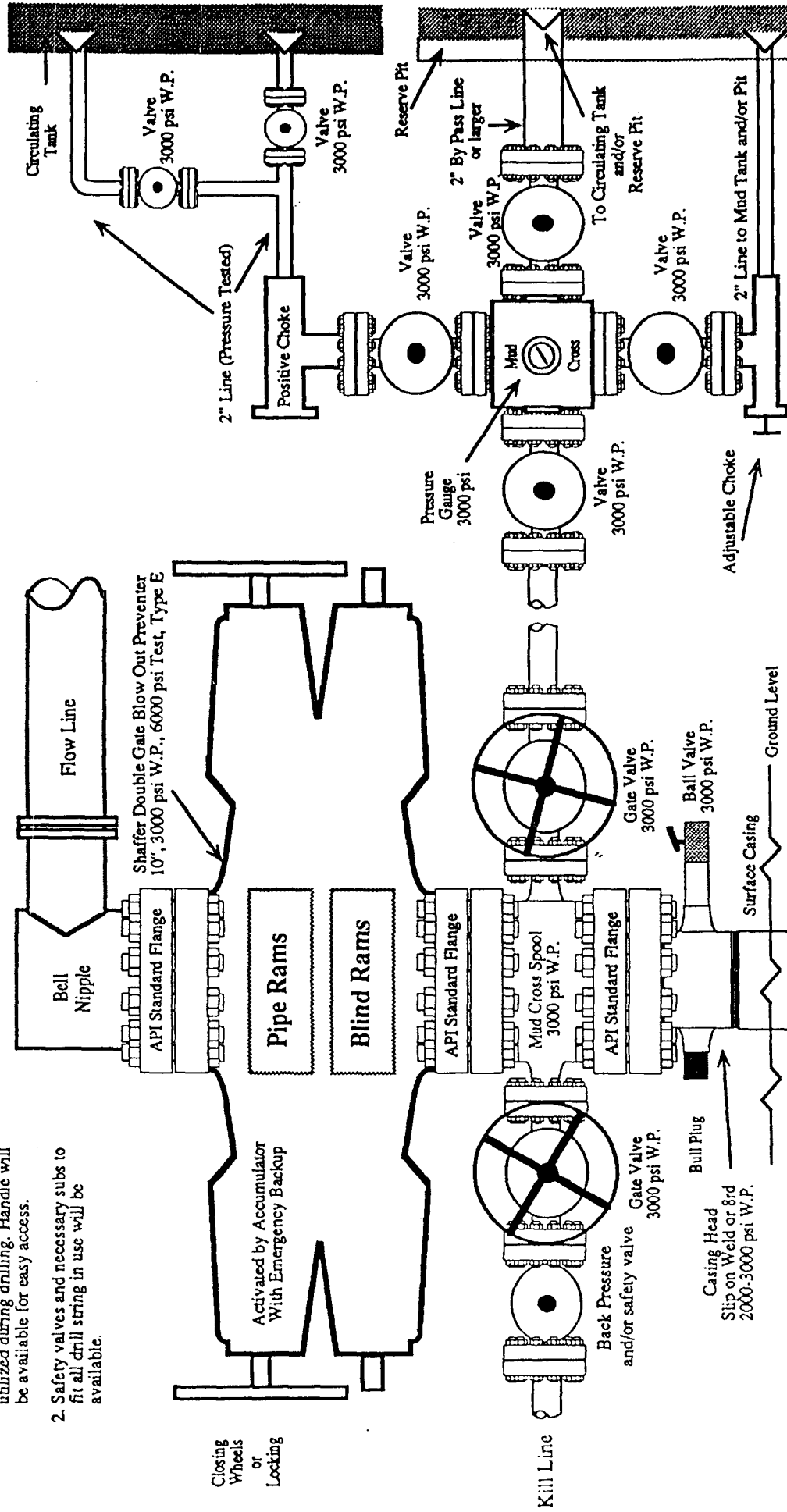
5. MUD PROGRAM

A nine pound polymer and fresh water mud system with a viscosity of ≈ 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.

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.

Elm Ridge Exploration Company, LLC
Jicarilla 78 PC #1
700' FSL & 1190' FWL
Sec. 12, T. 23 N., R. 5 W.
Rio Arriba County, New Mexico

PAGE 4

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 $\leq 1,000$ psi.

8. OTHER INFORMATION

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

Elm Ridge Exploration Company, LLC
Jicarilla 78 PC #1
700' FSL & 1190' FWL
Sec. 12, T. 23 N., R. 5 W.
Rio Arriba County, New Mexico

PAGE 5

Surface Use Plan

1. DIRECTIONS & EXISTING ROADS (See PAGES 10 & 11)

From the equivalent of Mile Post 90.5 on US 550 ...
Go North 3.9 miles on J-6
Then turn right onto a two track and go East 2,815.5' to the proposed pad

Roads will be maintained to at least equal to their present condition.

2. ROAD TO BE BUILT OR UPGRADED

The final 2,815.5' of access will be crowned and ditched with a 14' wide running surface. Maximum disturbed width will be $\approx 30'$. Borrow ditches will be turned out at least once every ≈ 100 yards on each side. The ditch turnouts will be skewed to drain. Maximum cut or fill = 2'. Maximum grade = 6%. No vehicle turn out is needed. No culvert, gate, or upgrade is needed.

3. EXISTING WELLS (See PAGE 11)

There are four gas or oil wells and one plugged and abandoned well within a one mile radius according to Oil Conservation Division and State Engineer's records. There are no water or injection wells within a mile.

4. PROPOSED PRODUCTION FACILITIES (See PAGES 11 - 13)

Production facilities may include a separator, dehydrator, meter run, and ≈ 210 bbl tank. All equipment will be painted a flat juniper green. A SDR-11 polyethylene $\approx 4"$ O. D. gas pipeline will be laid 2,815.5' west along the