Form 3160-3 (April 2004)

UNITED STATESTING IAM 18 ΡM 1 DEP BUF

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

ARTMENT OF THE INTERIOR "	10 / 1	' -	 S Lease Serial No. CONTRACT 77
REAU OF LAND MANAGEMENT	DECEIVE	ΕŊ	See Jen Contract in

6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REPLICATION ₩И КОТЪЖ JICARILLA APACHE NATION 7 If Unit or CA Agreement, Name and No. **V** DRILL la. Type of work: REENTER 8. Lease Name and Well No. Ib. Type of Well: Oil Well Gas Well Other ✓ Single Zone Multiple Zone JICARILLA 77 PC #3 Name of Operator 9. API Well No. ELM RIDGE EXPLORATION COMPANY, LLC 30-039-3a. Address P.O. BOX 156 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory BALLARD PICTURED CLIFFS **BLOOMFIELD, NM 87413** (505) 632-3476 11. Sec., T. R. M. or Blk. and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 1160' FSL & 1480' FEL At surface 16-23N-5W NMPM At proposed prod. zone SAME 13. State 12. County or Parish 14. Distance in miles and direction from nearest town or post office* RIO ARRIBA 5 AIR MILES ENE OF COUNSELOR, NM NM Distance from proposed' 17. Spacing Unit dedicated to this well 16. No. of acres in lease location to nearest property or lease line, ft.
(Also to nearest drig. unit line, if any)

1,160 2,560 SF4 18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 20. BLM/BIA Bond No. on file 19. Proposed Depth 2,422' (PC #1) 2,300 **BIA NATION WIDE 886441C** 22. Approximate date work will start* 23. Estimated duration Elevations (Show whether DF, KDB, RT, GL, etc.) 3 WEEKS 6,712' GL 03/15/2006 24. Attachments RCVD FEB 17'11 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.

01/11/2006

- 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).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). DIST. 3
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer

FAX: (505) 466-9682

25. Signature Title CONSULTANT

Name (Printed/Typed) **BRIAN WOOD** PHONE: (505) 466-8120

Approved by (Signature)

Name (Printed/Typed)

Title

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.

5.9 compliance

District I PO Box 1980 Hobbs, NM 88241-1980

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, 1994 Instructions on back

OIL CONSERVATION DIVISION

PO Box 2088 IRN 18 PM 1 52 Fee Lease - 3 Copies Santa Fe, NM 87504 2088

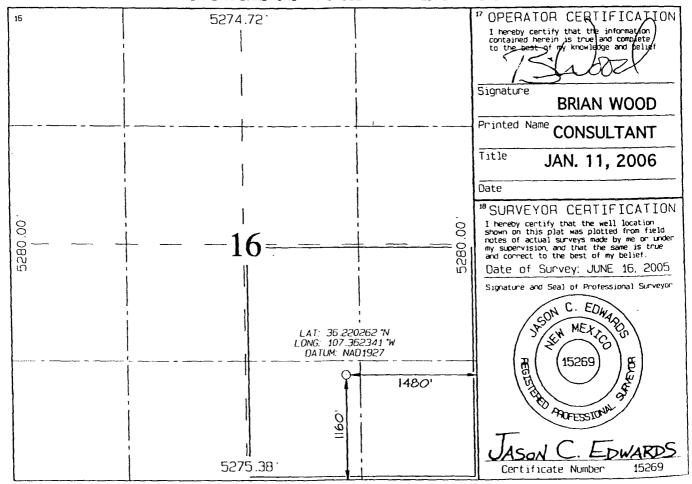
RECEIVED ___ AMENDED REPORT OTO FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Numbe	r	*Pool Code	Pool Name	
30.039.29	762	71439	BALLARD PICTURED CLIFFS	
Property Code	*Property Name		Well Number	
38391	JICARILLA 77 PC			3
'OGRID No.		*Operator Name		*Elevation
149052		ELM RIDGE EXPL	6712°	

¹⁰ Surface Location UL or lot no. Sect ion Township Feet from the North/South line Feet from the East/West line RIO **EAST SOUTH** 1480 0 16 **53N** 5W 1160 ARRIBA ¹¹Bottom Hole Location If Different From Surface UL or lot no. Sect ion North/South line Feet from the East/West line County Township Lot Idn Feet from the 14 Consolidation Code 12 Dedicated Acres 13 Joint or Infall ¹⁵ Order No. 160.0 Acres - (SE/4)

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



Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	Elevation
San Jose	0'	5'	+6,712'
Ojo Alamo Ss	1,562'	1,567'	+5,150'
Kirtland Shale	1,812'	1,817'	+4,900'
Pictured Cliffs Ss	2,097'	2,102'	+4,615'
Total Depth (TD)*	2,300'	2,305'	+4,412'

2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	<u>Coal Zones</u>
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.



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)	<u>Grade</u>	Type	<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	LT&C	New	2,300'

Surface casing will be cemented to the surface with ≈ 70 cubic feet (≈ 60 sacks) Class B with 1/4#/sk Flocele + 2% CaCl₂. 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 ≈ 565 cubic feet (≈ 479 sacks) Class B with 1/4#/sk Flocele + 2% CaCl₂. 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.



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.

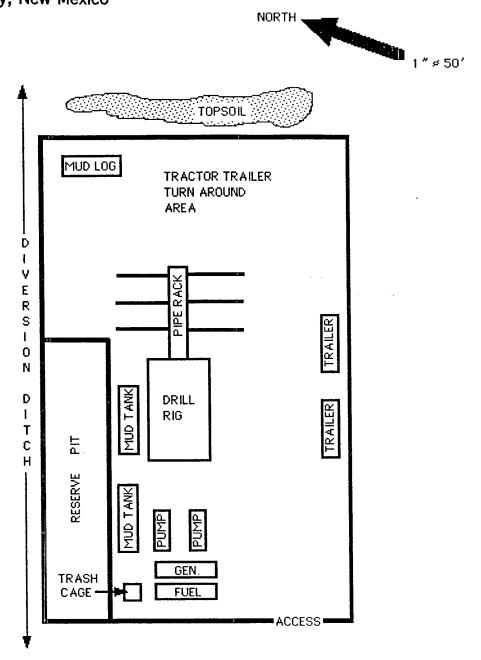
7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum expected bottom hole pressure will be \leq 920 psi.

8. OTHER INFORMATION

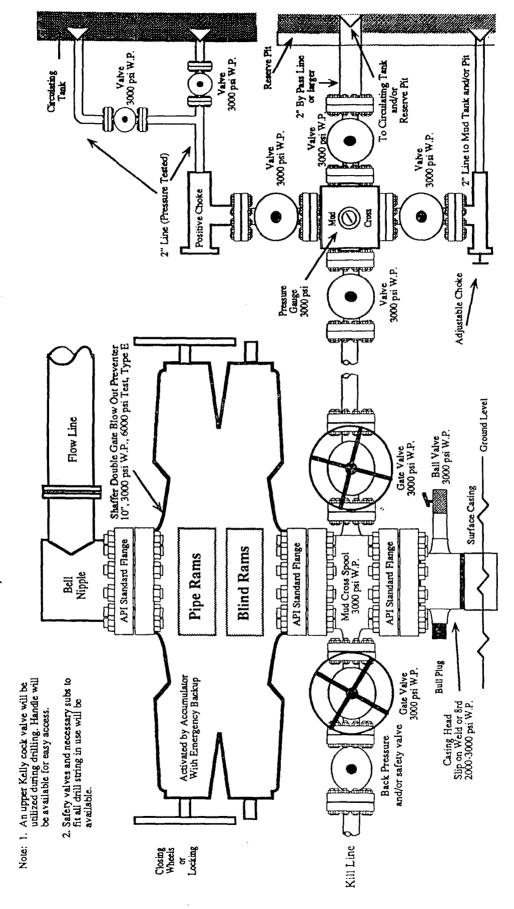
The anticipated spud date is upon approval. It is expected it will take <1 week to drill and \approx 2 weeks to complete the well.







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.