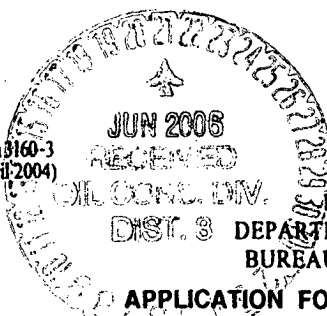


Form 3160-3  
(April 2004)



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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-14922
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 N/A
2. Name of Operator XTO ENERGY INC		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 2700 FARMINGTON AVE., BLDG. K-1 FARMINGTON, NM 87401		8. Lease Name and Well No. CARSON FEDERAL I I C
3b. Phone No. (include area code) (505) 324-1090		9. API Well No. 30-039- 29607
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 705 FNL & 755 FEL At proposed prod. zone Same		10. Field and Pool, or Exploratory BLANCO MESA VERDE
14. Distance in miles and direction from nearest town or post office* 26 AIR MILES SOUTHWEST OF DULCE		11. Sec., T. R. M. or Blk. and Survey or Area A 34-28N-4W NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 705'	16. No. of acres in lease 640	17. Spacing Unit dedicated to this well N2 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,126' (#10)	19. Proposed Depth 6,900'	20. BLM/BIA Bond No. on file BLM NATIONWIDE 57 91 73
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7,233' GL	22. Approximate date work will start* 10/01/2005	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 07/16/2005
---------------	------------------------------------	--------------------

Title CONSULTANT	PHONE: (505) 466-8120	FAX: (505) 466-9682
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Approved by (Signature)	Name (Printed/Typed)	Date 6/19/06
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Title Acting AFM	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)

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

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

NMCO

**Certificate Number**

**District I**

1625 N. French Dr., Hobbs, NM 88240

**District II**

1301 W. Grand Ave., Artesia, NM 88210

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-103

May 27, 2004

WELL API NO.	30-039-29602
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	NMNM-14922
7. Lease Name or Unit Agreement Name	CARSON FEDERAL I
8. Well Number	1 C
9. OGRID Number	167067
10. Pool name or Wildcat	BLANCO MESA VERDE

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator XTO ENERGY INC.

3. Address of Operator 2700 FARMINGTON AVE., BLDG. K-1,  
SURFACE FARMINGTON, NM 87401

4. Well Location

Unit Letter A : 705 feet from the NORTH line and 755 feet from the EAST line  
Section 34 Township 28N Range 4W NMPM County RIO ARRIBA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
7,233' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type DRILLING Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >500'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbls Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

**NOTICE OF INTENTION TO:**

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

**SUBSEQUENT REPORT OF:**

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: DRILLING PIT ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Brian Wood TITLE CONSULTANT DATE 7-16-05

Type or print name BRIAN WOOD

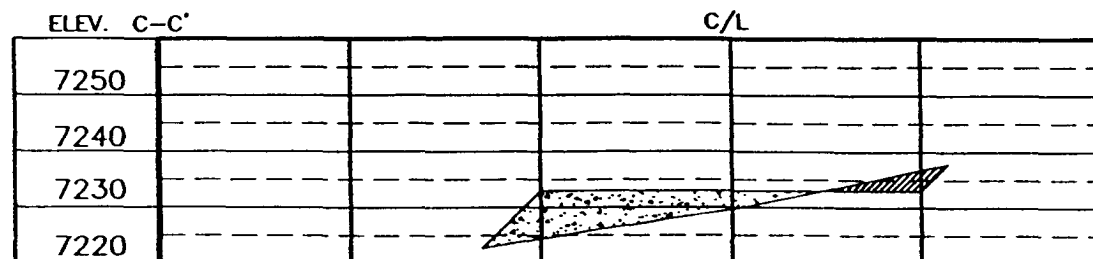
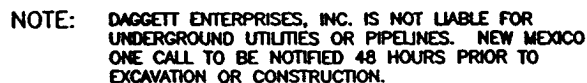
E-mail address: brian@permitswest.com Telephone No. (505) 466-8120

**For State Use Only**


APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 1 DATE JUN 21 2006

Conditions of Approval (if any):

LAT. = 36°37'16" N.  
LONG. = 107°13'56" W  
NAD 27



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

INVOICE	DATE	RECEIVED BY
		<b>Daggett Enterprises, Inc.</b> <b>Surveying and Oil Field Services</b> P. O. Box 15068 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-4018 NEW MEXICO L.S. No. 14831
DUPLICATE BILL	COPIES: CR2-40C78 DATE: 08/13/04	

XTO Energy Inc.  
Carson Federal I 1 C  
705' FNL & 755' FEL  
Sec. 34, T. 28 N., R. 4 W.  
Rio Arriba County, New Mexico

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## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
San Jose	000'	12'	+7,233'
Ojo Alamo Sandstone	3,333'	3,335'	+3,900'
Fruitland Coal	3,833'	3,845'	+3,400'
Pictured Cliffs Ss	4,033'	4,045'	+3,200'
Lewis Shale	4,433'	4,445'	+2,800'
Cliff House Sandstone	5,933'	5,945'	+1,300'
Menefee Shale	6,033'	6,045'	+1,200'
Mesa Verde Sandstone	6,233'	6,245'	+1,000'
Mancos Shale	6,633'	6,645'	+600'
Total Depth	6,900'	6,912'	+333'

### 2. NOTABLE ZONES

<u>Gas or Oil Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland	San Jose	Fruitland
Pictured Cliffs	Ojo Alamo	Menefee
Mesa Verde	Fruitland	

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the geologist's recommendations.

### 3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to

XTO Energy Inc.  
Carson Federal I 1 C  
705' FNL & 755' FEL  
Sec. 34, T. 28 N., R. 4 W.  
Rio Arriba County, New Mexico

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2005 AUG 15 PM 1 39

RECEIVED  
070 FARMINGTON NM

be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) An 8-5/8" x 11" 2,000 pound double ram BOP system with a choke manifold and mud cross will be tested to 200 psi and then to 1,000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 30 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure is  $\approx$ 2,800 psi. BOP and mud system will control pressure.

#### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	<u>Setting Depth</u>
12-1/4"	9-5/8"	36	J-55	New	S T & C	320'
8-3/4"	7"	20	J-55	New	S T & C	4,000'
6-1/4"	4-1/2"	10.5	J-55	New	S T & C	6,900'

Surface casing will be cemented to surface with  $\approx$ 256 cubic feet ( $\approx$ 200 sacks) Type III + 1/4 pound per sack cello-flake + 2% CaCl<sub>2</sub>. Yield = 1.28 cubic feet per sack. Weight = 15.2 pounds per gallon. Excess: >100%.

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Conventional centralizers will be set on the bottom two joints of the surface casing and every fourth joint to surface.

Intermediate casing will be cemented to the surface with >70% excess. Lead with  $\approx 315$  sacks ( $\approx 819$  cubic feet) Type III + 8% gel + 1%  $\text{CaCl}_2$  + 1/4 pound per sack cello flake mixed at 11.9 pounds per gallon and 2.60 cubic feet per sack. Tail will be  $\approx 150$  sacks ( $\approx 211$  cubic feet) Type III + 1%  $\text{CaCl}_2$  + 1/4 pound per sack cello flake mixed at 14.5 pounds per gallon and 1.41 cubic feet per sack. Casing will be set at least 50' into the Kirtland shale.

Production casing hole will be cemented to  $\approx 3,300'$  (i. e.,  $\approx 700'$  overlap) with  $\approx 100\%$  excess. Lead with  $\approx 150$  sacks ( $\approx 455$  cubic feet) Type III + 8% gel + 0.5% FL-52 + 0.2% CD-32 + 2% Pheno seal mixed at 11.4 pounds per gallon and 3.03 cubic feet per sack. Tail with  $\approx 150$  sacks Premium Light HS + 2% KCl + 0.2% CD-32 + 0.5% FL-52 + 1/2 pound per sack cello flake + 2% Pheno seal mixed at 12.5 pounds per gallon and 2.01 cubic feet per sack.

Conventional centralizers will be set on the bottom two joints, every second joint to  $\approx 6,000'$  and every fourth joint from  $\approx 2,000'$  to surface.

## 5. MUD PROGRAM

<u>RANGE</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>WATER LOSS</u>	<u>ADDITIVES</u>
0' - 320'	Fresh-Spud	8.5-8.8	30	NC	Gel, lime
320' - 4,000'	Fresh Water	8.5-8.8	28	NC	Gel, lime sweeps
4,000' - TD	Fresh Water	8.5-8.8	35	10 cc	Gel, soda ash, LCM

## 6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. Induction logs will be run from TD to  $\approx 3,000'$ . Neutron density - GR logs will be run from TD to base of surface casing.

XTO Energy Inc.  
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7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum bottom hole pressure will be  $\approx 2,760$  psi.

8. OTHER INFORMATION

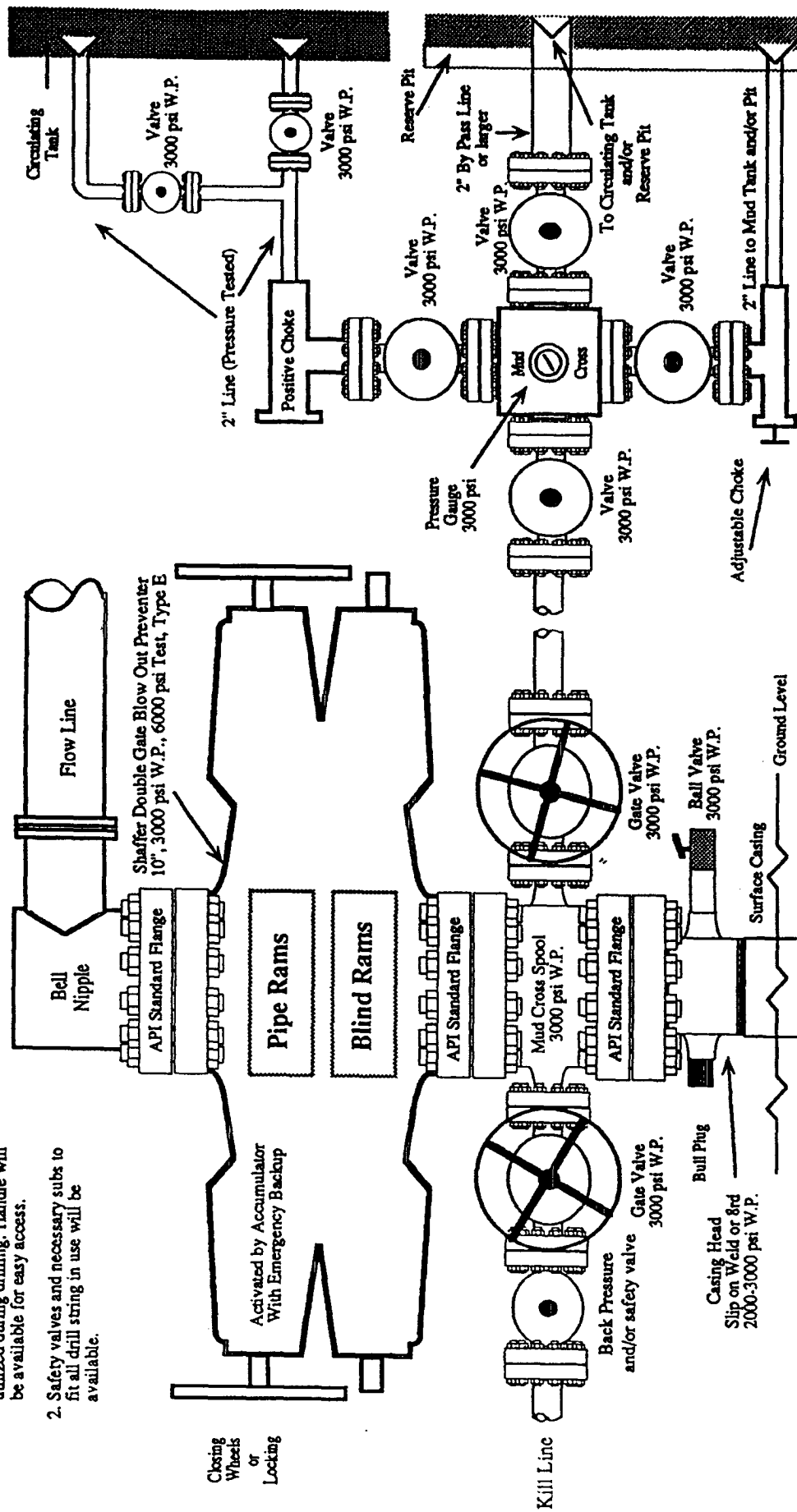
The anticipated spud date is upon approval. It is expected it will take about four weeks to drill and complete the well.



# 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.