

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

NMSF-080382A

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA Agreement, Name and No.

N/A

8. Lease Name and Well No.

Schwerdtfeger 8 #4

9. API Well No.

30-045- 32150

10. Field and Pool, or Exploratory

Basin Fruitland Coal

11. Sec., T., R., M., or Blk. and Survey or Arca

I 8-27n-11w NMPM

12. County or Parish

13. State

1a. Type of Work: ☒ DRILL

☐ REENTER

070 Farmington, NM

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

☒ Single Zone

☐ Multiple Zone

2. Name of Operator

XTO Energy Inc.

3a. Address 2700 Farmington Ave., Bldg. K-1
Farmington, NM 87401

3b. Phone No. (include area code)
(505) 324-1090

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 1890' FSL & 820' FEL
At proposed prod. zone Same

14. Distance in miles and direction from nearest town or post office*

9 air miles S of Bloomfield, New Mexico

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

820'

16. No. of Acres in lease

2,081.12

17. Spacing Unit dedicated to this well

E2 (320 acres)

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

50'

19. Proposed Depth

2,100'

20. BLM/BIA Bond No. on file

BLM nation wide: 57 91 73

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6,173' ungraded

22. Approximate date work will start*

Upon Approval

23. Estimated duration

2 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.
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).

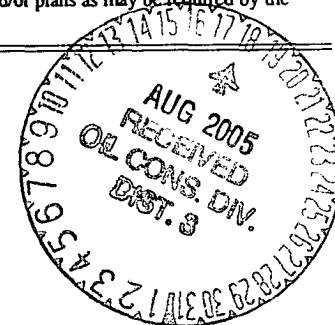
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

Comments

*XTO's Schwerdtfeger #2 which is a Dakota well

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".



cc: BLM (& OCD), NAPI, Patton, Tribe

25. Signature

B. Wood

Name (Printed/Typed)

Brian Wood

Date

1-22-04

Title

Consultant

Phone: 505 466-8120

FAX: 505 466-9682

Approved by (Signature)

[Signature]

Name (Printed/Typed)

Date

8-16-05

Title

AFM

Office

FFO

Application approval does not warrant or certify the 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.

~~NO DUPLICATION~~

NHOC

HOLD C104 FOR change in status
for Schwerdtfeger #2

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 87505

OIL CONSERVATION DIVISION

**2040 South Pacheco
Santa Fe, NM 87505**

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code	*Pool Name	
		71629	BASIN FRUITLAND COAL	
*Property Code	*Property Name		*Well Number	
30340	SCHWERTFEGER 8"		4	
*OGRD No.	*Operator Name		*Elevation	
167067	XTO ENERGY INC.		6173'	

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
1	8	27-N	11-W	.	1890	. SOUTH .	820	. EAST	. SAN JUAN

"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 320			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		SEC. CORNER FD. 2 1/2" B.C. U.S.G.L.O. 1913 BURIED 3" IN FIELD	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Brian Wood</i> Signature BRIAN WOOD Printed Name CONSULTANT Title JAN. 22, 2004 Date
	8	N 0-00-35 E 5281.09'	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plot 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. <i>David A. Johnson</i> Date of Survey 2004 JAN 28 AM 10:42 Signature and Seal of Professional Surveyor 14827 14827 Certificate Number
SEC. CORNER CALC'D. CORNER	LAT: 36°35'15" N. LONG: 108°01'16" W. 820' 1890' 5278.70' S 89-58-44 W	SEC. CORNER FD. 2 1/2" B.C. U.S.G.L.O. 1913 BURIED 3" IN FIELD	

XTO Energy Inc.
Schwerdtfeger 8 #4
1890' FSL & 820' FEL
Sec. 8, T. 27 N., R. 11 W.
San Juan 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>Sub Sea Elevati</u>
Nacimiento Fm	000'	5'	+6,173'
Ojo Alamo Ss	748'	753'	+5,425'
Kirtland Shale	888'	893'	+5,285'
Fruitland Coal	1,713'	1,718'	+4,460'
Pictured Cliffs Ss	1,893'	1,898'	+4,280'
Lewis Shale	2,073'	2,078'	+4,100'
Total Depth (TD)*	2,100'	2,105'	+4,073'

* all elevations reflect the ungraded ground level of 6,173'

2. NOTABLE ZONES

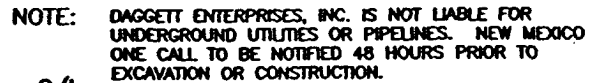
<u>Gas & Oil Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Ojo Alamo	
	Fruitland	

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 system to be used is not yet known. A typical 2,000 psi stack, manifold, and testing procedures are on Page 3.

LAT. = 36°35'15" N.
LONG. = 108°01'16" W



ELEV. C-C'	C/L				
6190					
6180					
6170					
6160					

DRAWN BY: B.L. ROW#: CR181 CADFILE: CR181CF8 DATE: 07/11/03

 **Daggett Enterprises, Inc.**
Surveying and Oil Field Services
P. O. Box 15068 Farmington, NM 87401
Phone (505) 326-1772 Fax (505) 326-6019

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4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connection</u>	<u>GL Setting De</u>
8-3/4"	7"	20	K-55	New	S T & C	160'
6-1/4"	4-1/2"	10.5	K-55	New	S T & C	2,100'

Surface casing will be cemented to the surface with ≈ 50 cubic feet (≈ 43 sacks) Class B + 1/4 lb/sk cello-flake + 2% CaCl_2 . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume: $\geq 100\%$ excess. A guide shoe and insert float will be used. W. O. C. = 12 hours. Surface casing will be tested to 1,500 psi for 30 minutes.

Production casing will be cemented to the surface. Total cement: >437 cubic feet. Volumes are calculated at $>100\%$ excess. If cement does not circulate to surface, then a temperature survey will be run to determine the actual cement top as needed. W. O. C. = 12 hours. Test to 2,000 psi.

Lead cement will be ≈ 185 sacks Class B light cement (65% cement/35% Poz with 6% gel) with 5 #/sack gilsonite + 1/4 #/sack Flocele. Yield = 1.99 cu ft/sk. Weight = 12.4 #/gal.

Tail cement will be ≈ 50 sacks 50/50 Class B Poz with 2% gel + 1/4#/sack Flocele + 0.5% Halad-9. Yield = 1.38 cubic feet/sack. Weight = 13.5 #/gallon.

Cement equipment will include a guide shoe, float collar, and 10 centralizers.

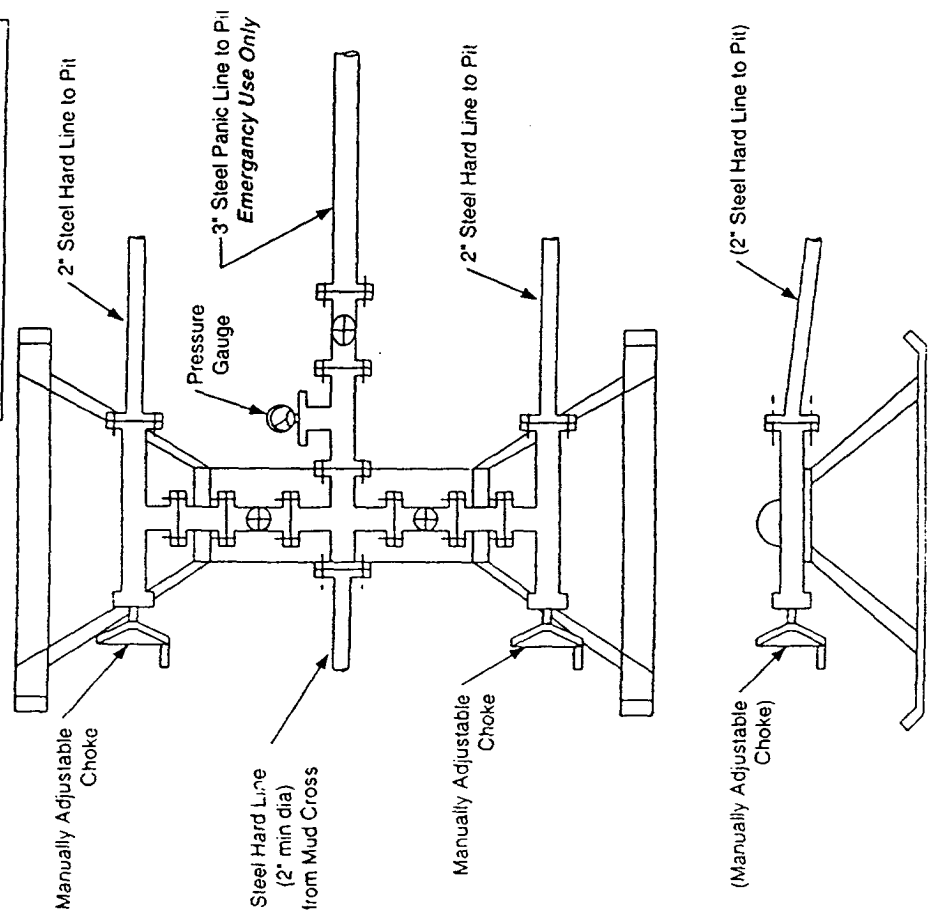
5. MUD PROGRAM

<u>Range</u>	<u>Mud Type</u>	<u>Weight</u>
0' - 160'	Fresh-Spud	8.4
160' - TD	LSND	8.6

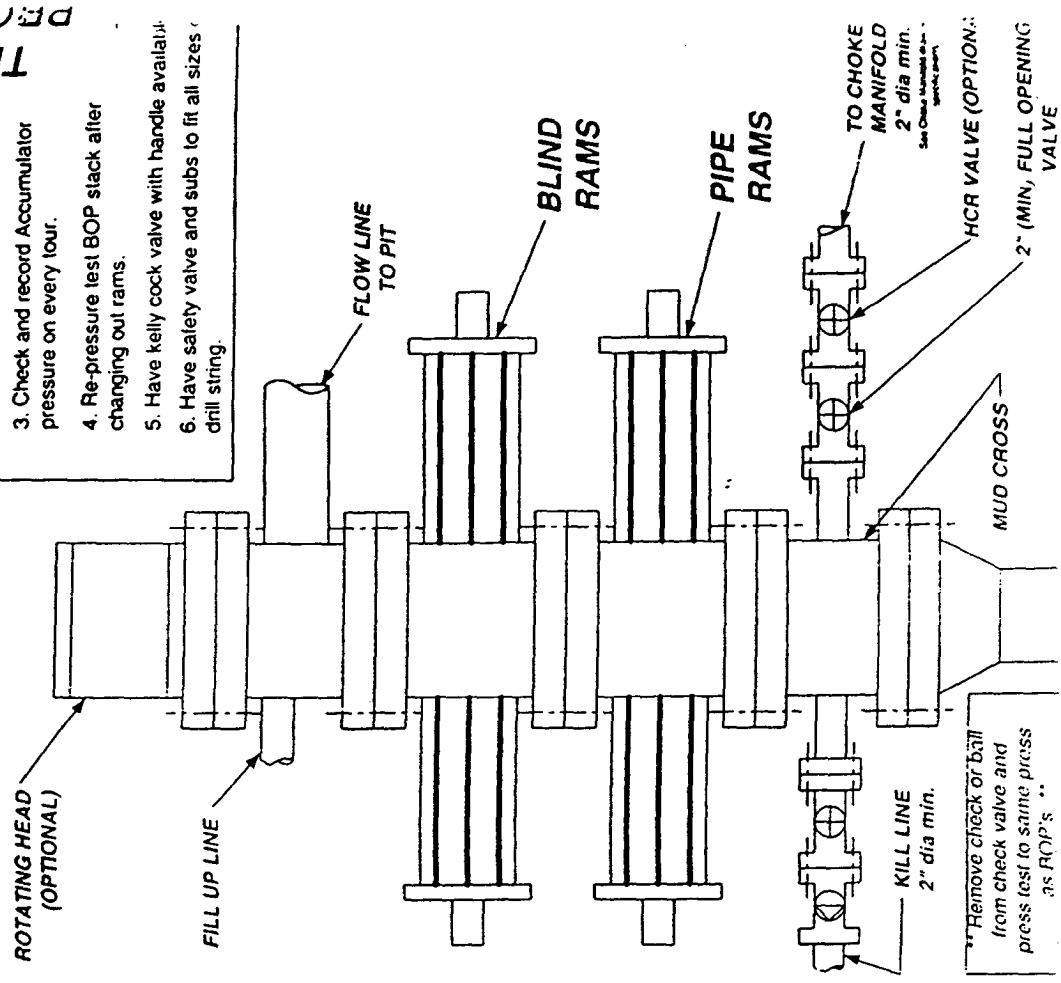
Lost circulation and absorption material will be on location.

CHOKES MANIFOLD **SCHEMATIC FOR DRILLING** **OPERATIONS** **CLASS 1 (2M) NORMAL** **PRESSURE**

- TESTING**
1. Stake all lines from choke manifold to pit.
 2. Pressure test choke manifold after installation.
 3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.



BOP SCHEMATIC FOR **DRILLING OPERATIONS** **CLASS 1 (2M) NORMAL** **PRESSURE**



- TESTING**
1. Pressure test BOP to 200-300 psig (low pressure) for 5 min.
 2. Test BOP to Working Press or to 70% internal yield of surf csg (10 min).
 2. Test operation of (both) rams on every trip.
 3. Check and record Accumulator pressure on every tour.
 4. Re-pressure test BOP stack after changing out rams.
 5. Have kelly cock valve with handle available.
 6. Have safety valve and subs to fit all sizes of drill string.

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6. CORING, TESTING, & LOGGING

No cores or drill stem tests are planned. Open hole logs will include GR, Neutron-Density, and Induction. The Neutron Density will be run from TD to 500'. The other logs will be run from TD to the base of the surface casing.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be $\approx$ 200 psi.

8. OTHER INFORMATION

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