

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

RECEIVED

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF-080382A
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. Schwerdtfeger 21 #2
3b. Phone No. (include area code) (505) 324-1090		9. API Well No. 30-045- 32277
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1385' FNL & 765' FWL At proposed prod. zone Same		10. Field and Pool, or Exploratory Basin Fruitland Coal
14. Distance in miles and direction from nearest town or post office* 12 air miles S of Bloomfield, New Mexico		11. Sec., T., R., M., or Blk. and Survey or Area E21-27n-11w NMPM
5. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 765'	16. No. of Acres in lease 2,081.12	17. Spacing Unit dedicated to this well W2 (320 acres)
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,045'	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.) 6,277' ungraded	22. Approximate date work will start* Upon Approval	23. Estimated duration 2 weeks
24. Attachments		

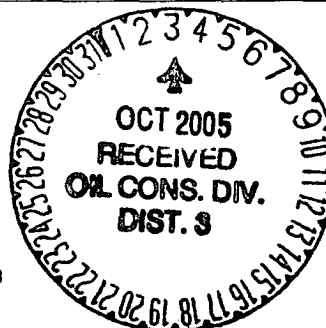
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 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. |

Comments

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

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



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

25. Signature 	Name (Printed/Typed) Brian Wood	Date 4-4-04
Title Consultant	Phone: 505 466-8120	FAX: 505 466-9682
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 9/28/05
Title AFM	Office FEO	

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.

NMOCB

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised June 10, 2003

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
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

¹ API Number 30-045-32277		² Pool Code 71629		³ Pool Name BASIN FRUITLAND COAL	
⁴ Property Code 30337		⁵ Property Name SCHWERTFEGER 21			⁶ Well Number 2
⁷ OGRID No. 167067		⁸ Operator Name XTO ENERGY INC.			⁹ Elevation 6277'

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
E	21	27-N	11-W	.	1385	NORTH	765	WEST	SAN JUAN

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 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" BC U.S.G.L.O. 1913	1385'	N 89-59-57 E 5277.5' (M)	CALC'D CORNER
765'	LAT: 36°33'51" N. (NAD 27) LONG: 108°00'54" W. (NAD 27)	21	
S 00-00-48 W 5283.2' (M)			
SEC. CORNER FD IRON PIPE AND T-POST			

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein
is true and complete to the best of my knowledge and
belief

Brian Wood
Signature
BRIAN WOOD
Printed Name
CONSULTANT
Title
APR. 4, 2004
Date

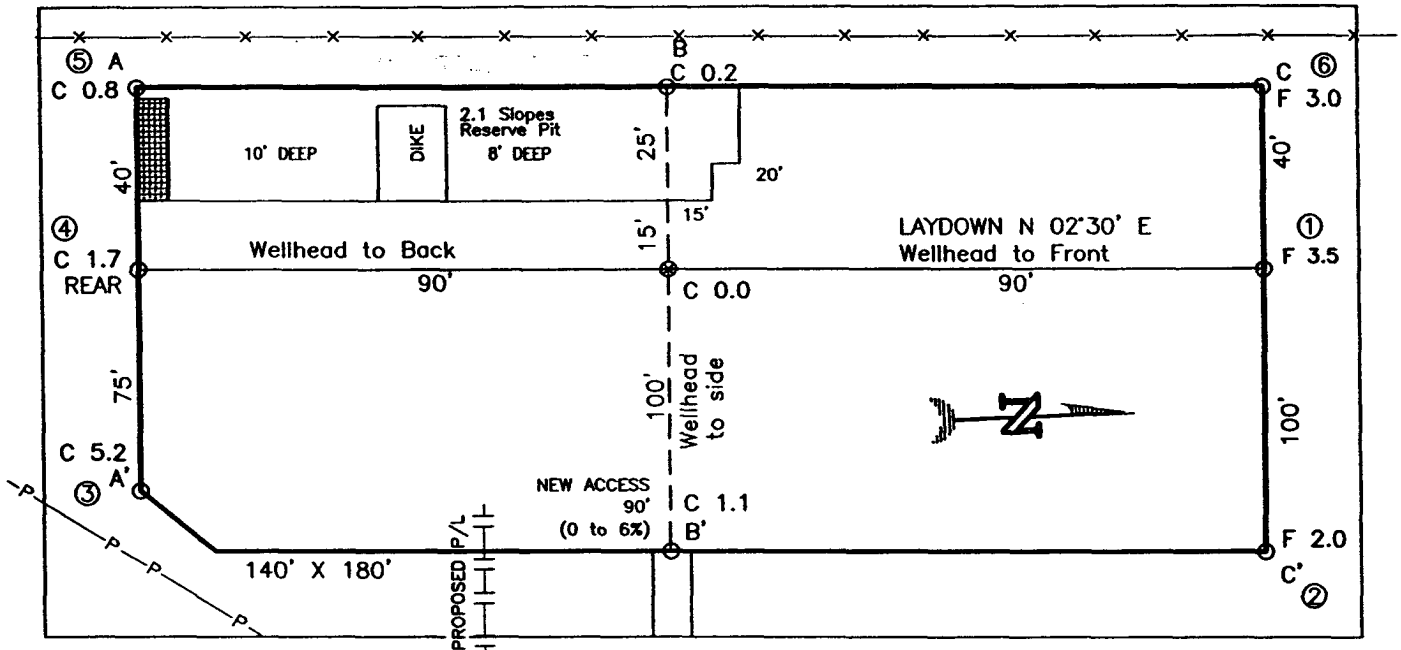
18 SURVEYOR CERTIFICATION

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.

12-9-03
Date of Survey
Signature and Seal of Professional Surveyor:
14827
Certificate Number

XTO ENERGY INC.
 SCHWERTDTEGER 21 No. 2, 1385' FNL 765' FWL
 SECTION 21, T27N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.
 GROUND ELEVATION: 6277', DATE: NOVEMBER 25, 2003

LAT. = 36°33'51" N.
 LONG. = 108°00'54" W
 NAD 27



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

ELEV. A-A' C/L

6290					
6280					
6270					
6260					

ELEV. B-B' C/L

6290					
6280					
6270					
6260					

ELEV. C-C' C/L

6290					
6280					
6270					
6260					

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.

XTO Energy Inc.
Schwerdtfeger 21 #2
1385' FNL & 765' FWL
Sec. 21, 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'	+6,277'
Ojo Alamo Ss	867'	872'	+5,410'
Kirtland Shale	927'	932'	+5,350'
Fruitland Coal	1,672'	1,677'	+4,605'
Pictured Cliffs Ss	1,887'	1,898'	+4,390'
Lewis Shale	2,087'	2,092'	+4,190'
Total Depth (TD)*	2,100'	2,105'	+4,177'

* all elevations reflect the ungraded ground level of 6,277'

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.

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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.

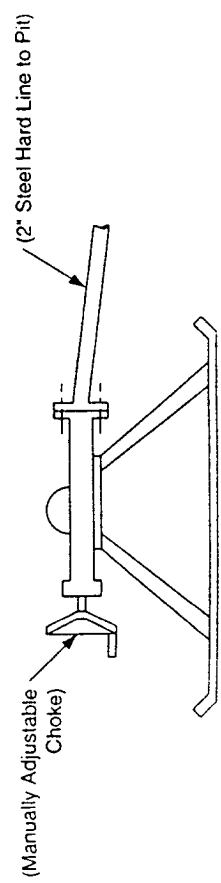
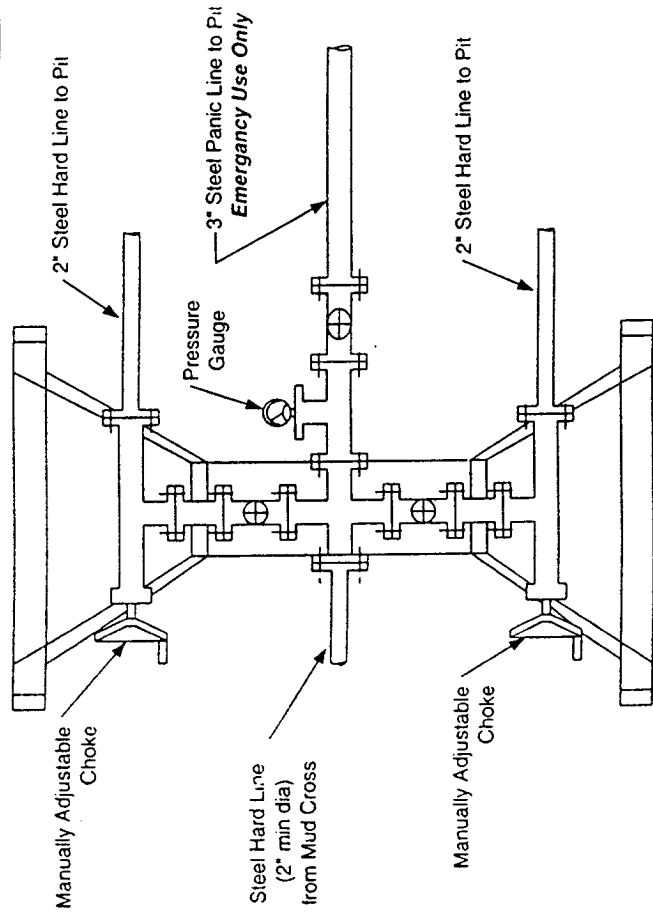
5. MUD PROGRAM

<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.

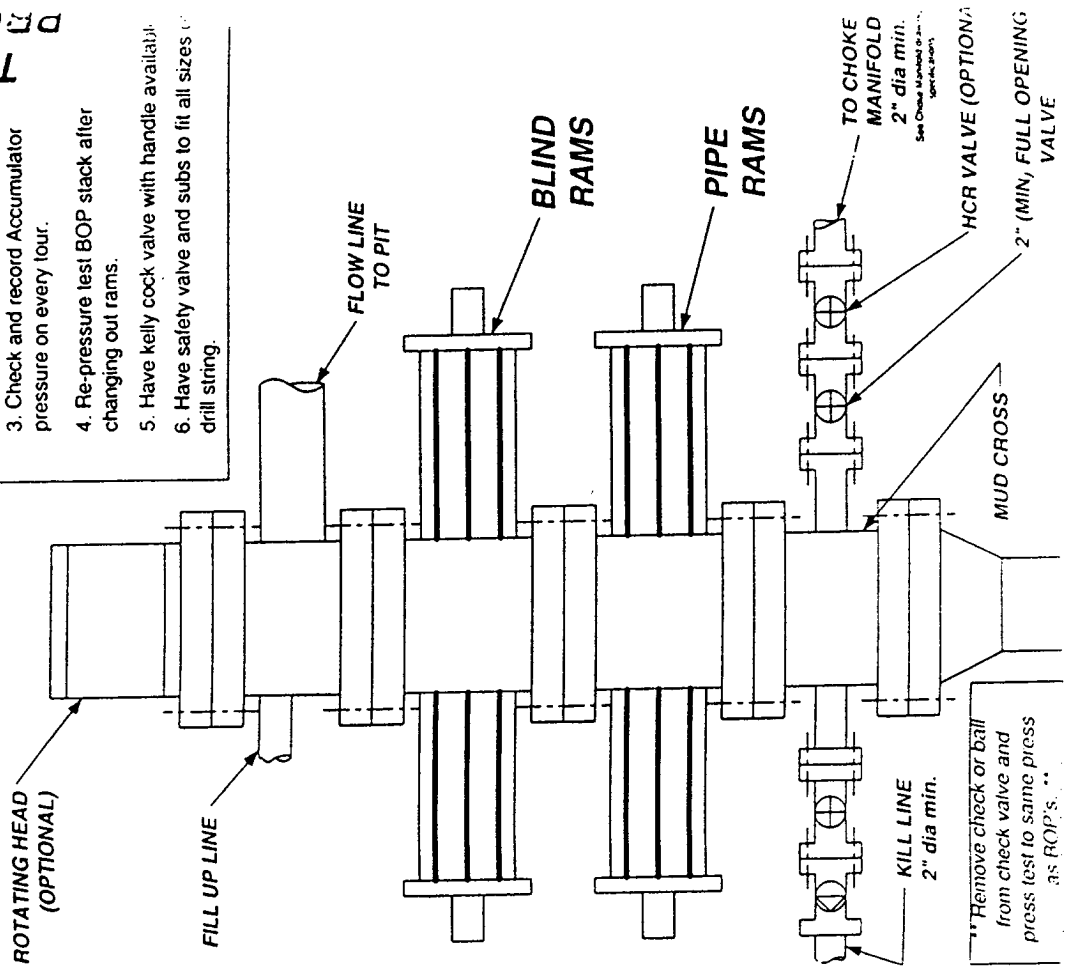
CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

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

1. Test BOP after installation.
- Pressure test BOP to 200-300 psig (low pressure) for 5 min.
- Test BOP to Working Press or to 70% internal yield of surf csg (10 min).
- Test operation of (both) rams on every trip.
- Check and record Accumulator pressure on every four.
- Re-pressure test BOP stack after changing out rams.
- Have Kelly cock valve with handle available.
- 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.