

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

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMSF-080382
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ 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	3b. Phone No. (include area code) (505) 324-1090	8. Lease Name and Well No. Schwerdtfeger 28 #2
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1115' FNL & 1295' FWL At proposed prod. zone Same		9. API Well No. 30-045- 32069
14. Distance in miles and direction from nearest town or post office* 12 air miles S of Bloomfield, New Mexico		10. Field and Pool, or Exploratory Basin Fruitland Coal
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,115'		11. Sec., T., R., M., or Blk. and Survey or Area 28-27n-11w NMPM
16. No. of Acres in lease 480		12. County or Parish San Juan
17. Spacing Unit dedicated to this well W2 (320 acres)		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A		19. Proposed Depth 2,000'
20. BLM/BIA Bond No. on file BLM nation wide: 57 91 73		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,280' 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



This action is subject to technical and principal review plus right to 43 CFR 3165.2 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 	Name (Printed/Typed) Brian Wood	Date 12-7-03
Title Consultant	Phone: 505 466-8120	FAX: 505 466-9682
Approved by (Signature) 	Name (Printed/Typed) Wayne Townsend	Date 8/19/05
Title Acting 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.

NMOCD

DISTRICT I
1825 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210

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

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 30338	⁵ Property Name SCHWERTFEGER 28	⁶ Well Number 2
⁷ OGRD No. 167067	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 6280'

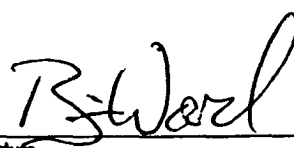
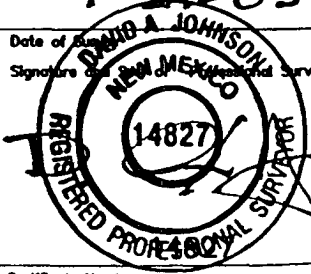
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D.	28	27-N	11-W	.	1115'	NORTH	1295'	WEST.	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

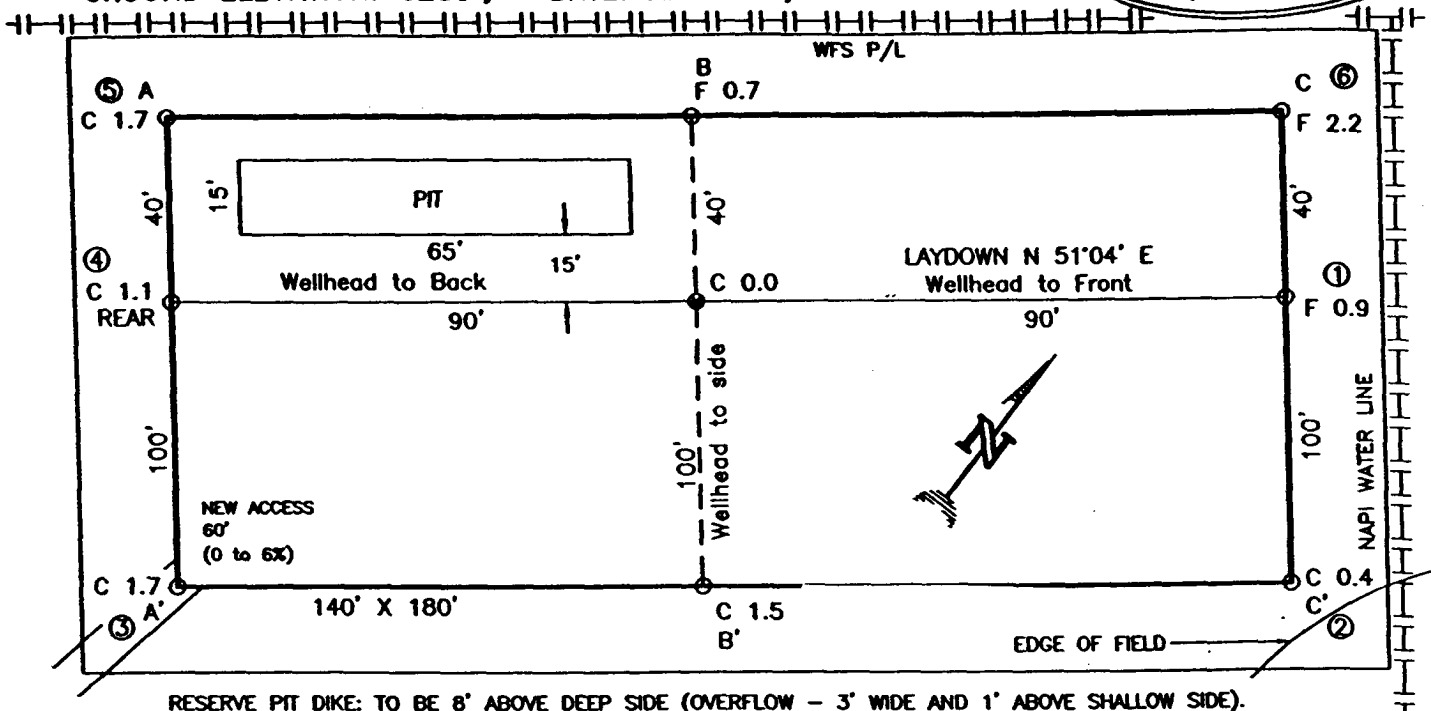
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320					¹³ Joint or Infill		¹⁴ Consolidation Code C		¹⁵ Order No.

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 IRON PIPE & T-POST 1295' 5281.20' (M) S 00-02-18 E CALC'D CORNER	N 89-58-50 E	5286.16' (M)	SEC. CORNER FD. 2 1/2" B.C. U.S.G.L.O. 1913 BURIED 3' IN FIELD X	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature BRIAN WOOD Printed Name CONSULTANT Title DEC. 7, 2003 Date
	28		X	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. 7-21-03 Date of Survey Signature of Registered Professional Surveyor:  Certificate Number

XTO ENERGY INC.
 SCHWERTFEGER 28 #2, 1115' FNL 1295' FWL
 SECTION 28, T27N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.
 GROUND ELEVATION: 6280', DATE: APRIL 24, 2003

LAT. = 36°33'01" N.
 LONG. = 108°00'50" W.
 (NAD83)



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

6300					
6290					
6280					
6270					

ELEV. B-B' C/L

6300					
6290					
6280					
6270					

ELEV. C-C' C/L

6300					
6290					
6280					
6270					

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 28 #2
1115' FNL & 1295' FWL
Sec. 28, 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'	+6,280'
Ojo Alamo Ss	780'	785'	+5,500'
Kirtland Shale	905'	910'	+5,375'
Fruitland Coal	1,605'	1,610'	+4,675'
Pictured Cliffs Ss	1,880'	1,805'	+4,400'
Lewis Shale	1,930'	1,935'	+4,350'
Total Depth (TD)*	2,000'	2,005'	+4,280'

* all elevations reflect the ungraded ground level of 6,280'

2. NOTABLE ZONES

Gas & Oil Zones

Fruitland
Pictured Cliffs

Water Zones

Nacimiento
Ojo Alamo
Fruitland

Coal Zone

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 Depth</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	2,000'

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: ≥ 417 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 ≈ 175 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.

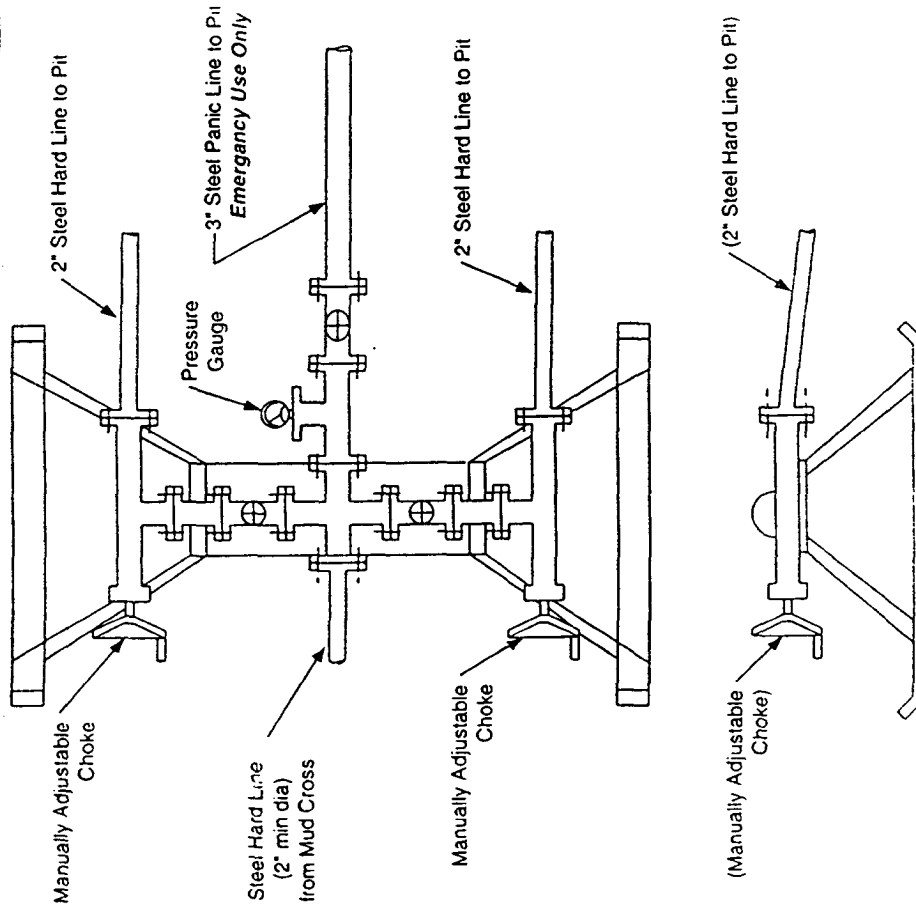
5. MUD PROGRAM

<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.

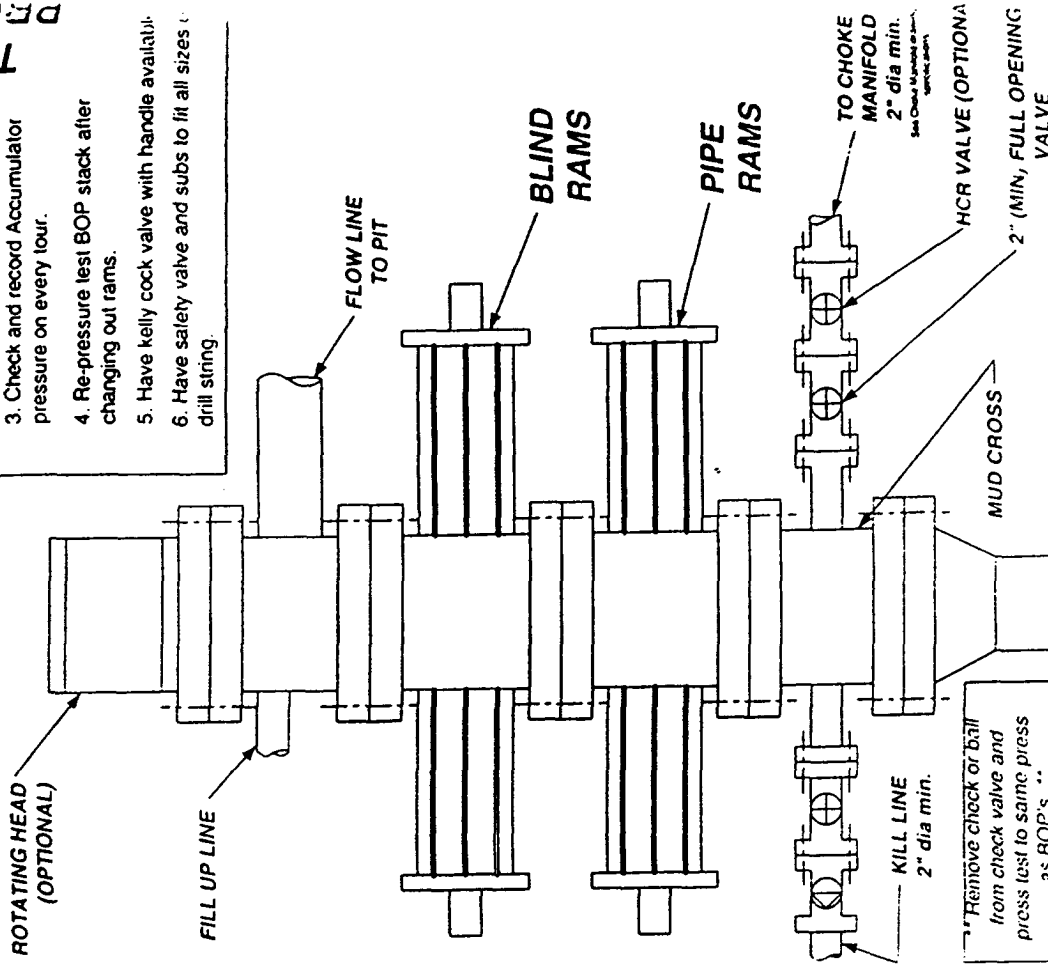
CHOKES MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

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 tour.
- 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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