

RECEIVED

Form 3160-3
(April 2004)

DEC 11 2008

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

UNITED STATES **Bureau of Land Management**
DEPARTMENT OF THE INTERIOR **Farmington Field Office**
BUREAU OF LAND MANAGEMENT

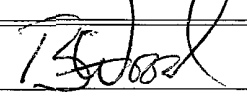
APPLICATION FOR PERMIT TO DRILL OR REENTER

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 382 ROAD 3100 AZTEC, NM 87410	3b. Phone No. (include area code) (505) 333-3159	8. Lease Name and Well No. SCHWERDTFEGER 4 R
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1250' FSL & 1915' FEL At proposed prod. zone SAME		9. API Well No. 30-045-34877
14. Distance in miles and direction from nearest town or post office* 8 AIR MILES SOUTH OF BLOOMFIELD		10. Field and Pool, or Exploratory KUTZ PICTURED CLIFFS, WEST
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 725'	16. No. of acres in lease 2,081.12	11. Sec., T. R. M. or Blk. and Survey or Area 8-27N-11W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,268' (8 #4)	19. Proposed Depth 2,100'	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,173' GL	22. Approximate date work will start* 05/01/2009	13. State NM
17. Spacing Unit dedicated to this well SE4 (= 160 ACRES)		
20. BLM/BIA Bond No. on file BLM NATIONWIDE 57-91-93 UTB000138		
23. Estimated duration 2 WEEKS		

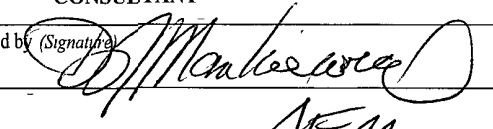
24. Attachments

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. |

25. Signature 	Name (Printed/Typed) BRIAN WOOD	Date 12/05/2008
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Title CONSULTANT	PHONE: (505) 466-8120	FAX: (505) 466-9682
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Approved by (Signature) 	Name (Printed/Typed)	Date 8/28/09
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Title AFM	Office FFO
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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)

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.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

**NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT**

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

SEP 11 2009

NMOCD

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

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

DISTRICT II
1301 W. Grand Ave., 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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34877	² Pool Code 79680	³ Pool Name KUTZ PICTURED CLIFFS, WEST (GAS)
⁴ Property Code 30335	⁵ Property Name SCHWERDTFEGER	⁶ Well Number 4R
⁷ OGRID No. 5380 167067	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 6173

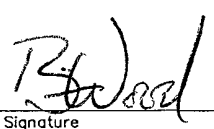
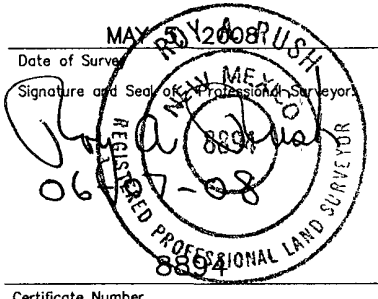
¹⁰ Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	8	27-N	11-W		1250	SOUTH	1915	EAST	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 160			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				FD. 2 1/2" BC. G.L.O.	17.
					OPERATOR CERTIFICATION
					I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
					 Signature
					12-5-08 Date
					BRIAN WOOD Printed Name
					(505) 466-8120
					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 knowledge and belief
					MAY 20 2008 Date of Survey
					Signature and Seal of Professional Surveyor
					
					Certificate Number

FD. 2 1/2" BC.
1913 G.L.O.

S 89°56'25" W
5279.20' (M)

1250'

1915'

FD. 2 1/2" BC.
G.L.O.

SURFACE:
LAT: 36.58588° N. (NAD 83)
LONG: 108.02473° W. (NAD 83)
LAT: 36°35'09.1" N. (NAD 27)
LONG: 108°01'26.8" W. (NAD 27)

N 00°00'35" E
5281.10' (M)

XTO Energy Inc.
Schwerdtfeger 4 R
1250' FSL & 1915' 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</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimiento Formation	0'	5'	+6,173'
Ojo Alamo Sandstone	763'	768'	+5,410'
Kirtland Shale	873'	878'	+5,300'
Fruitland Formation	1,173'	1,178'	+5,000'
Pictured Cliffs Sandstone	1,898'	1,903'	+4,275'
Lewis Shale	2,073'	2,078'	+4,100'
Total Depth (TD)	2,100'	2,105'	+4,073'

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 model to 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 $\approx 1,000$ psi. Upper and lower

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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) 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 will be ≤ 840 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>Connection</u>	<u>Depth Set</u>
8-3/4"	7"	20	K-55	New	ST & C	160'
6-1/4"	4-1/2"	10.5	K-55	New	ST & C	2,100'

Surface casing will be cemented to the surface with ≈ 50 cubic feet (≈ 43 sacks) Class B + 1/4 pound per sack 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 $\approx 1,500$ psi for ≈ 30 minutes.

Production casing will be cemented to the surface. Total cement: ≥ 431 cubic feet. Volumes are calculated at $>100\%$ excess. If cement does not circulate to the surface, then a temperature survey will be run to determine the actual cement top as needed. W. O. C. = 12 hours. Test to $\approx 2,000$ psi.

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Lead cement will be \approx 182 sacks Class B light cement (65% cement/35% Poz with 6% gel) with 5 pounds per sack gilsonite + 1/4 pound per sack cello-flake. Yield = 1.99 cubic feet per sack. Weight = 12.4 pounds per gallon.

Tail cement will be \approx 50 sacks 50/50 Class B Poz with 2% gel + 1/4 pound per sack cello-flake + 0.5% Halad-9. Yield = 1.38 cubic feet per sack. Weight = 13.5 pounds per gallon.

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

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, or hydrogen sulfide are expected. Maximum expected bottom hole pressure will be \leq 840 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.

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1. DIRECTIONS (See PAGES 9 & 10)

From Bloomfield ...

Go South 9 miles on US 550 to the equivalent of Mile Post 143.2

Then turn right and go West 1.4 miles on paved N-3003

Then turn left and go South 1/2 mile on paved N-4005

Then turn left and go East 1/2 mile on a dirt road through 2 XTO pads

Then turn right and go South \approx 305' along staked pipeline to the pad

Roads will be maintained to at least equal their present condition.

2. ROAD TO BE BUILT OR UPGRADED (See PAGE 11)

The final \approx 305' of road will be built to BLM Gold Book standards. This will consist of crowning and ditching with a \approx 14' wide running surface. Maximum disturbed width will be \approx 20'. Road crown will be 0.03' to 0.05' per foot. Topsoil will initially be windrowed beside the road. Borrow ditch inside slope will be \approx 4:1. Borrow ditch outside slope will be \approx 2:1. Ditch bottom will be a smooth V with no vertical cut. Borrow ditch depth will be \approx 1 foot. Once the ditch is complete, topsoil will be pulled back onto the cut slopes so there is no berm. Maximum cut or fill = 2'. Maximum grade = 1%. Only upgrade needed is to fill ruts in the dirt road. No culvert, vehicle turn out, or gate is needed.

3. EXISTING WELLS (See PAGE 10)

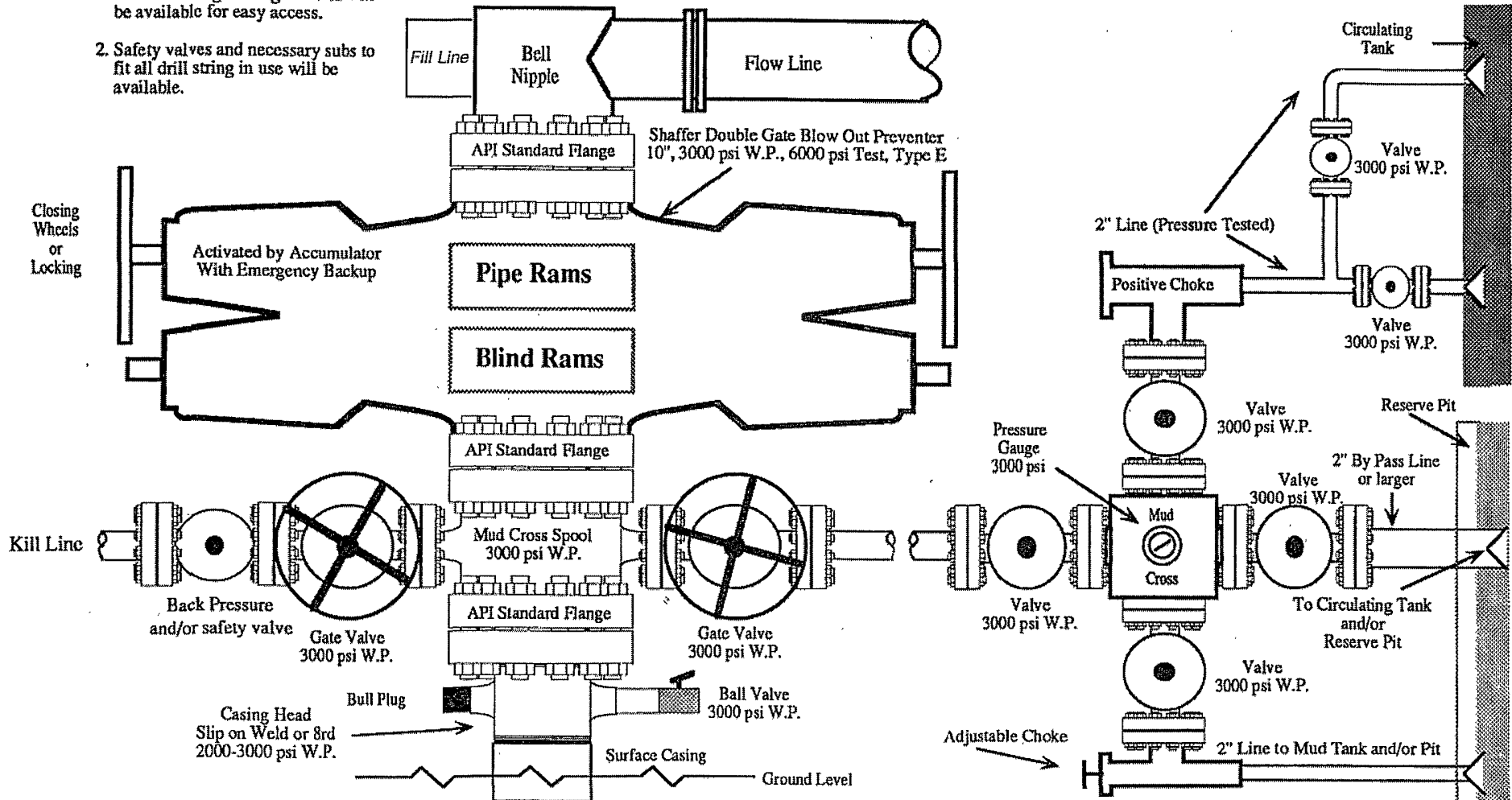
There are 25 oil or gas wells and 8 plugged wells within a mile radius. There are no water, injection, or disposal wells within a mile.

4. PROPOSED PRODUCTION FACILITIES (See PAGE 11)

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.