Form 3160-3 (April 2004)

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

HAUTED STATES

DEPARTMENT OF THE DEPARTMENT OF THE DEPARTMENT OF LAND MAN	INTERIOR SET 20	2009	5 Lease Serial No. NOG 05031728	 37
APPLICATION FOR PERMIT TO	たいこうい しょうつく	1014 OIL 11-1-0-1	6. If Indian, Allotee or	
la. Type of work. DRILL REENTE	ER		7 If Unit or CA Agreem PENDING	nent, Name and No.
lb. Type of Well Onl Well Gas Well Other	✓ Single Zone Multi	ole Zone	8 Lease Name and We BOXER #22	
2 Name of Operator XTO Energy Inc.			9 API Well No. 30-045-3.50	a 7
3a. Address 382 CR 3100 Aztec, NM 87410	3b. Phone No. (include area code) 505/333-3100		10. Field and Pool, or Exp BASIN FRUITL	•
Location of Well (Report location clearly and in accordance with an At surface 2105' FSL x 410' FWL 2001 FSL x 5001 FSL x 400' FWL	ry State requirements.*)		11. Sec., T. R. M or Blk (L) Sec 27, T25N	•
At proposed prod. zone 700' FSL x 700' FEL 14. Distance in miles and direction from nearest town or post office* 24 miles SE of Bloomfield P.O.			12. County or Parish SAN JUAN	13. State NM
15 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig unit line, if any) 410'	16 No. of acres in lease		Unit dedicated to this wel	1
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	19 Proposed Depth 5650' MD/1665' TVD		BIA Bond No. on file 04312789	
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 6682' Ground Elevation	22. Approximate date work will sta 01/01/2010	rt*	23 Estimated duration 2 Weeks	
The Cillians and the control of Control	24. Attachments	. 1 1 4	F	CVD FEB 1'10
The following, completed in accordance with the requirements of Onshor 1. Well plat certified by a registered surveyor.			s torm. Is unless covered by an ex	IL CONS. DIV.
A Drilling Plan. A Surface Use Plan (If the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).	Lands, the Item 20 above) 5. Operator certific	cation specific info	rmation and/or plans as m	DIST. 3
25. Signature Malia Villais	Name (Printed/Typed) MALIA VILLERS		D	ate 09/23/2009
PERMITTING TECH.				1 /
Approved by (Signature) Mankie Lita	Name (Printed/Typed)		D	ate /29/2018
Title AFM	Office FEO			,
Application approval does not warrant or certify that the applicant hold conduct operations thereon. Conditions of approval, if any, are attached.	s legal or equitable title to those righ	ts in the subj	ect lease which would enti	tle the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	rime for any person knowingly and vio any matter within its jurisdiction.	villfully to m	ake to any department or a	agency of the United
*/Instructions on nage ?				

Hold C104

SEE ATTACHED FOR **CONDITIONS OF APPROVAL**

for Directional Survey and "As Drilled" plat

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

NNOCD K

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

Tris 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".

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

State of New Mexico Energy, Minerals & Natural Resources Department

Santa Fe, N.M. 87505

Form C-102 Revised October 12, 2005

OIL CONSERVATION DIVISION State Lease - 4 Copies DISTRICT II 1301 W. Grand Avenue, Artesia, N.M. 88210 DISTRICT III 1220 South St. Francis Dr. 1000 Rio Brazos Rd., Aztec, N.M. 87410

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, N.M. 87505 SEP 29 2009

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	Pool Code				
⁴ Property Code	⁶ Property Na	me	• Well Number		
38004	BOXE	२	22		
OGRID No.	Operator N	ame	⁹ Elevation		
5380	XTO ENERG	Y, INC.	6682		

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		
L	27	25 N	10 W		2105	SOUTH 410		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		

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	27	25 N	IO W		700	SOUTH	700	EAST	SAN JUAN
12 Dedicated Acres 12 Joint			nfill		14 Consolidation C	ode	15 Order No.		
S/2, 320	± AC								

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

	K A NUN-SIANI				
16 S 89°56'56" W	2637.02'	S 89°54'20" W	2639.36'		¹⁷ OPERATOR CERTIFICATION
2640.01		○ = SURFACE LOCA ● = BOTTOM HOLE	LOCATION	2642.37'	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.
N 0°02'07" E				S 0°02'41" W	Signature Date Malia Villers Printed Name
ll	SECTION	ON 27		. 1	
	SECTION	ON 27		1	18 SURVEYOR CERTIFICATION
NAD 83 LAT: 36.370 LONG: 107.89	577° N	ON 27		643.53	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.
LAT: 36.370	577° N	ON 27		43.53	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 bettef. 8/29/08
LAT: 36.3709 LONG: 107.89	577° N			643.53	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.



Well Name:

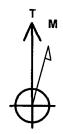
Boxer #22

San Juan Division Drilling Department

Calculation Method: Minimum Curvature

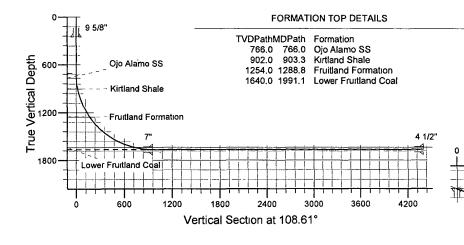
Geodetic Datum: North American Datum 1983

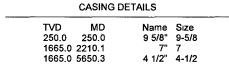
Lat: 36° 22' 14.077 N Long: 107° 53' 29.627 W



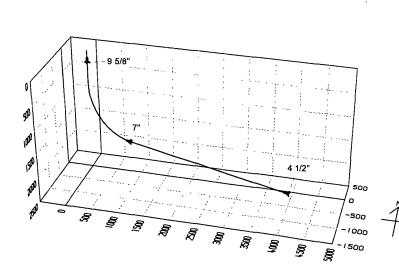
Azimuths to True North Magnetic North: 10.12°

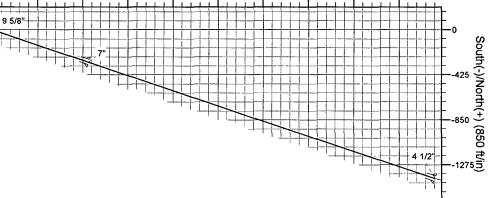
Magnetic Field Strength: 50718.9snT Dip Angle: 63.18° Date: 7/22/2009 Model: IGRF200510





1275





2550

2975

3400

3825

West(-)/East(+) (850 ft/in)

2125

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	710.1	0.00	0.00	710.1	0.0	0.0	0.00	0.00	0.0	
3	2210.1	90.00	108,61	1665.0	-304.8	905.0	6.00	108.61	954.9	
4	5650.3	90.00	108.61	1665.0	-1402.7	4165.3	0.00	0.00	4395.2	Proposed BHLBoxer 22

Form 3160-5 (August 2007)

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant to conduct approval to the applicant to conduct approval of the applicant to conduct approve the applicant to conduct applicant to conduct

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND WANAGEMENT

RECE	DFORM APPROVED OMB NO. 1004-0137 Expires July 31, 2010
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29/240

JAN 28 2018 ase Serial No.

SUNDRY NOTICES AND REPOR		NOG 05031737
Do not use this form for proposals to abandoned well. Use Form 3160-3 (API	D) for such proposals. Famington F	SATISTICATION NAME SIDE OFFICES NAVAJO ALLOTMENT
SUBMIT IN TRIPLICATE - Other inst		7. If Unit or CA/Agreement, Name and/or No PENDING
1. Type of Well Oil Well X Gas Well Other	,	8. Well Name and No. BOXER #22
2. Name of Operator XTO Energy Inc.		
Ba. Address	3b. Phone No. (include area code)	9. API Well No. 30-045- 3502 7
382 CR 3100 Aztec, NM 87410 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 2105' FSL X 410' FWL (L) SEC. 27-T25N-	505/333-3100 R10W	10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL
BHL: 700' FSL X 700' FEL		11. County or Parish, State SAN JUAN NM
12. CHECK APPROPRIATE BOX(ES) TO	O INDICATE NATURE OF NOTICE, REPO	
TYPE OF SUBMISSION	TYPE OF ACTION	
X Notice of Intent Acidize Alter Casi Subsequent Report Casing Rep Final Abandonment Notice Change Pla	ng Fracture Treat Reclamation Dair New Construction Recomplete	Other <u>REVISED</u>
Convert to	Injection Plug Back Water Disp	osal
3. Describe Proposed or Completed Operation (clearly state all pertiner If the proposal is to deepen directionally or recomplete horizontally, Attach the Bond under which the work will be performed or provide following completion of the involved operations. If the operation retesting has been completed. Final Abandonment Notices shall be findetermined that the final site is ready for final inspection.) Please see attached revised drilling program	give subsurface locations and measured and true ver- le the Bond No. on file with BLM/BIA. Required st sults in a multiple completion or recompletion in a n iled only after all requirements, including reclamation	tical depths of all pertinent markers and zones, ubsequent reports shall be filed within 30 days ew interval, a Form 3160-4 shall be filed once
14. I hereby certify that the foregoing is true and correct Name (Printed Typed) MALIA VILLERS	Title PERMITTING TECH.	
Signature MOLIO 170 LPLA	Date 1/28/2010	
THIS SPACE FOR	FEDERAL OR STATE OFFICE USE	

Tıtle

Office

XTO ENERGY INC.

Boxer #22 APD Data January 27, 2010

Location: 2105' FSL x 410' FWL Sec 27, T25N, R10W County: San Juan

State: New Mexico

Bottomhole Location: 700' FSL x 700' FEL Sec 27, T25N, R10W

GREATEST PROJECTED TVD: 1665' GREATEST PROJECTED MD: 5650'

APPROX GR ELEV: <u>6682'</u> Est KB ELEV: 6694' (12' AGL)

OBJECTIVE: Fruitland Coal

1. MUD PROGRAM:

INTERVAL	0' to 250'	250' to 2210'	2210' to TD
HOLE SIZE	12.25"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	FW/Polymer	Air/Mist
WEIGHT	8.6-9.0	8.4-8.8	NA
VISCOSITY	28-32	28-32	NA
WATER LOSS	NC	NC	NC

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes. Use Fruitland Coal produced water as make-up water for mist fluid. Pump enough fluid to dampen vibration at directional BHA. If directional control is not maintainable in air/mist environment convert to polymer mud.

2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at \pm 250' in a 12-1/4" hole filled with 9.20 ppg mud

									FF 6			
					Coll	Burst						
					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll ¹	Burst ²	Ten ³
0'-250'	250'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	18.76	32.7	48.6

Intermediate Casing: 7" casing to be set at ±2210' MD, 1665' TVD in 8.75" hole filled with 9.20 ppg mud.

					Coll	Burst						
					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll ¹	Burst ²	Ten ³
0'-2210	2210'	23.0#	J-55	ST&C	3270	4360	284	6.276	6.151	4.10	5.47	5.89

Production Casing: 4.5" casing to be set at ± 5650 ' MD, 1665' TVD in 6.125" hole filled with 8.4 ppg mud.

					Coll	Burst						
					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll ¹	Burst ²	Ten ³
2150'-												
5650'	3500'	10.5	J-55	ST&C	4010	4790	132	4.052	3.927	5.51	6.59	3.59

¹Collapse SF is based on evacuated annulus and hydrostatic at TVD.

²Burst SF is based on evacuated casing and hydrostatic at TVD.

³Tensile SF is based on hanging air weight of casing in a vertical hole at measured depth.

3. WELLHEAD:

- A. Casing Head: WHI QDF System (or equivalent), 9-5/8" x 7", 3,000 psig WP (4,000 psig test) with 9-5/8" 8rnd thread ST&C pin end on bottom and 4-1/2" slips on top.
- B. Tubing Head: WHI W2F (or equivalent), 7.063" nominal, 5,000 psig WP (5,000 psig test), 5-1/2" slip-on or weld-on.

4. <u>CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):</u>

A. Surface: 9.625", 36.0#, J-55, ST&C casing to be set at \pm 250' in 12-1/4" hole.

140 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 177 ft³, 100% excess of calculated annular volume to 250'.

B. Production Casing: 7", 23#/ft, J-55, ST&C casing to be set at ± 2210 'MD, 1665' TVD in 8.75" hole.

LEAD:

± 143 sx of Premium Lite FM or CBM Lite typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.1 ppg, 2.22 ft³/sk, & 12.04 gal wtr/sk.

TAIL:

± 100 sx of Type III or V cement typically containing accelerator, LCM, dispersant, and fluid loss additives at 14.2 ppg, 1.48 ft³/sk, & 7.34 gal wtr/sk.

Total estimated slurry volume for the 7" production casing is 465 ft³.

C. <u>Production Liner:</u> 4.5", 10.5#/ft, J-55, ST&C casing is to be set at 5650' MD, 1665' TVD in 6.125" hole.

The production liner will be set using an uncemented liner hanger. The liner may be tied back to surface during the completion of the well.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs (if available) plus 40%. It will be attempted to circulate cement to the surface.

5. LOGGING PROGRAM:

- A. Mud Logger: A geologic consultant or unmanned mud logging unit will begin logging the well once the surface shoe is drilled out and remain on the well to TD.
- B. Open Hole Logs as follows: Gamma Ray from Surface shoe to TD.

6. FORMATION TOPS:

See attached Directional Program.

**** Maximum anticipated BHP should be <2,000 psig (<0.30 psi/ft) *****

7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
John Klutsch	Project Geologist	817-885-2800	

JDN 1/27/10

XTO Energy Inc.

Planning Report

Casing Points			
Measured Vertical Depth Depth (ft) (ft)	Name		Hole Diameter (;;)
250 0 250.0	9 5/8"	9-5/8	12-1/4
2,210.1 1,665.0	7"	7	8-3/4
5,650.3 1,665.0	4 1/2"	4-1/2	6-1/8

766 0 766.0 Ojo Alar 903.3 902.0 Kırtland	Shale 0 00
1,288.8 1,254.0 Fruitland	l Formation 0.00 ruitland Coal 0 00

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.

TESTING PROCEDURE

