FORM APPROVED

### RECEIVED

Form 3160-3 (February 2005)

(February 2005) MAR 1 1 2008 CMB No. 1004-0137 Expires March 31, 2007									
וחם	UNITED STATES	NTERIOR							
BU	PARTMENT OF THE I	AGEMENT TO THE	and Mana	gement	NMNM \$14916	· · · · · · · · · · · · · · · · · · ·			
APPLICATION	N FOR PERMIT TO	DRILL OR REE	NTER	Office	6. If Indian, Allotee or Tribe Name N/A				
la. Type of work:  DRILL	la. Type of work: DRILL REENTER								
Ib. Type of Well: Oil Well	ple Zone	8. Lease Name and Well No.  Valencia Canyon #47A							
2. Name of Operator XTO Energy	y, Inc.				9. API Well No. 30	-039-3049			
3a. Address 382 CR 3100 AZTEC, NM 87410		3b. Phone No. (include 505-333-3100	area code)		10. Field and Pool, or Ex Blanco Mesaver				
4 Location of Well (Report location of	clearly and in accordance with an	y State requirements.*)	· · · · · · · · · · · · · · · · · · ·		11. Sec., T. R. M. or Blk.	and Survey or Area			
At surface 820' FSI At proposed prod. zone same	L x 1940' FEL				(O) Sec 22, T28N	₹, <b>R4W</b>			
14. Distance in miles and direction from	nearest town or nost office*				12. County or Parish	13. State			
Approximately 41.1 miles Eas	<u>-</u>	fice			Rio Arriba	NM_			
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any	v) 820'	16. No. of acres in le	ase	17. Spacin	ng Unit dedicated to this well				
(Also to hearest drig, whit thie, it and	,,	19 Proposed Depth 20 BLM/			BIA Bond No on file				
to nearest well, drilling, completed, applied for, on this lease, ft.	1300'				-000138				
21. Elevations (Show whether DF, KD 7336' Ground Elevation	B, RT, GL, etc.)	22. Approximate date work will start* 07/14/2008			23. Estimated duration 2 weeks				
		24. Attachment	3						
The following, completed in accordance	with the requirements of Onshor	e Oil and Gas Order N	o.1, must be a	ttached to the	is form.				
Well plat certified by a registered sur     A Drilling Plan.	•	Ito	m 20 above).	•	ns unless covered by an ex	cisting bond on file (see			
3. A Surface Use Plan (if the location SUPO must be filed with the appropriate of the surface of		6. S	perator certification of the c		ormation and/or plans as n	12y be required by the			
25. Signature Lyla Va	ishan	Name (Printed Kyla V				Oate 03/07/2008			
Title Regulatory Complian	ce								
Approved by (Signature)	rules Get	Name (Printed	Typed)		I	Date 6/3/05			
Title	ATM -	Office	- je - (	$\mathcal{D}$	<del></del>	31 d ( )			
Application approval does not warrant of conduct operations thereon. Conditions of approval, if any, are attact		s legal or equitable titl	e to those righ	nts in the sub	oject lease which would ent	itie the applicant to			
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent				willfully to n	nake to any department or	agency of the United			

\*(Instructions on page 2)

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

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".

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

NMOCD &

000

1625 N. Fench Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies

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

OIL CONSERVATION DIVISION

Fee Lease - 3 Copies

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

1220 South St. Francis Dr. MAR 11 2008 Santa Fe, NM 87504-2088

DISTRICT IV

☐ AMENDED REPORT 1220 South St. Francis Dr., Santa Fe, NM 87505 Bureau of Land Management WELL LOCATION AND ACREAGE DEDICATION PEAT API Number <sup>2</sup>Pool Code 23\9 <sup>3</sup>Pool Name LANCO ESAVERDE Well Number <sup>8</sup>Property Name Property Code VALENCIA CANYON OGRID No. \*Operator Name • Elevation XTO ENERGY INC. 7336 <sup>10</sup> Surface Location UL or lot no. Feet from the North/South line Feet from the East/West line Section Township Ronge Lot Idn County RIO ARRIBA SOUTH **EAST** 28-N 4-W 820 1940 0 22 "Bottom Hole Location If Different From Surface UL or lot no. Lot Idn Feet from the North/South line Feet from the East/West line Section Township Range County 13 Joint or Infill 14 Consolidation Code 18 Order No. <sup>2</sup> Dedicated Acres 320 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 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 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 64233° N. (E8 DAY) LONG:107.23660° W. (NAD 83) OCTOBER 121, 2007 LAT: 36'38'32 4" N. (NAD 27) Date of Sun LONG.107'14'09.6' W. (NAD 2X) LOCATION IS STAKED RELATIVE TO EXISTING WELLS AND DRY HOLE ON RECORD WITH N.M. OIL & GAS CONSERVATION COMMISSION. SECTION AND QUARTER CORNERS ARE NON-EXISTANT IN THE AREA. DEPENDENT RESURVEY OF THE TOWNSHIP IS REQUIRED TO OBTAIN EXACT DIMENSIONS PROM THE SECTION LINES. (940' 8894 Certificate Number

	•					
Submit 3 Copies To Appropriate District  State of New Mexico	Form C-103					
Office Energy, Minerals and Natural Resources District I 1625 N. French Dr., Hobbs, NM 87240	WELL API NO 39 3049					
District II 1301 W. Grand Ava. Artesia NM 88210 OIL CONSERVATION DIVISION						
District III 1220 South St. Francis Dr.	5. Indicate Type of Lease  STATE  FEE					
1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, NM 87505 District IV.	6. State Oil & Gas Lease No.					
1220 S. St. Francis Dr., Santa Fe, NM 87505	FEDERAL LEASE					
SUNDRY NOTICES AND REPORTS ON WELLS  (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH	7. Lease Name or Unit Agreement Name: VALENCIA CANYON					
PROPOSALS.)  1. Type of Well:	8. Well Number					
Oil Well Gas Well Other	#47A					
2. Name of Operator	9. OGRID Number 5380					
3. Address of Operator	10. Pool name or Wildcat					
382 CR 3100 Aztec, NM 87410	BLANCO MESAVERDE					
4. Well Location						
Unit Letter O: 820 feet from the SOUTH line and	1940feet from theline					
Section 22 Township 28N Range 4W	NMPM County RIO ARRIBA					
11. Elevation (Show whether DR, RKB, RT, G. 7336' GROUND ELEVATION	R, etc.)					
Pit or Below-grade Tank Application X or Closure	Bengalista naturalista (habita habita habita habita ana mendeuna natura natura habitana					
Pit typeDRILL_ Depth to Groundwater _> 100 _ Distance from nearest fresh water well _>1000	Distance from nearest surface water >1000					
Pit Liner Thickness: mil Below-Grade Tank: Volume 8000 bbls; Const	ruction Material					
12. Check Appropriate Box to Indicate Nature of Not NOTICE OF INTENTION TO:  PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ REMEDIAL WO	SUBSEQUENT REPORT OF:					
TEMPORARILY ABANDON						
PULL OR ALTER CASING  MULTIPLE  CASING TEST CEMENT JOB	ABANDONMENT AND					
OTHER: PIT X OTHER:						
	d give pertinent dates, including estimated date					
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. XTO Energy plans to construct a lined pit on location for drilling.						
	,					
I hereby certify that the information above is true and complete to the best of my know						
grade tank has been will be constructed or closed according to NMOCD guidelines X, a general pe						
SIGNATURE TITLE Regula E-mail address:	tory Compliance DATE 03/07/2008  kyla vaughan@xtoenergy.com					
Type or print name Kyla Vaughan	Telephone No. 505-333-3159					
For State Use Only Deputy O	il & Gas Inspector, District #3  JUN 1 6 2006					
APPROVED BY TITLE	District #3 JUN 1 6 2008					
Conditions of Approval, if any:						
	EXHIBIT <b>D</b>					

NAD 83 XTO ENERGY INC. LAT. = 36.64233° N VALENCIA CANYON No. 22SE, 820 FSL 1940 FEL SECTION 22, T28N, R4W, N.M.P.M., RIO ARRIBA COUNTY, N.M. LONG. = 107.23660° W NAD 27 LAT. = 36°38'32.4" N GROUND ELEVATION: 7336' DATE: OCTOBER 12, 2007 LONG. = 107'14'09.6" В С C 16.2 CONSTRUCTION ZONE C 12.9 PIT: 12' DEEP 200' x 85' 20 8' DEEP 20, 85, LAYDOWN N 17'09' W 1 Wellhead to Back Wellhead to Front I(4) 2.8 1.1, **O**C 2.8 145' REAR 145 õ M O. METER HOUSE TANK **EXISTING** WELLPAD 7 TANK (P&A) VALENCIA CANYON No. 13 (3) C' ② F 13.6 В, 16.4 F 12.0 255' X 290'  $(355' \times 390') = 3.18 \text{ ACRES}$ 

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' 7350 7340 7330 7320 C/L ELEV. B-B' 7350 7340 770 Services NM 87499 7330 d Oll Fletc

Formington, NM 8

Fax (505) 37 7320 Surveying and Oil Field P. O. Box 510 Farmington Phone (SCS) 326-1772 - Fax (SC NEW MEXICO L.S. No. 8 ELEV. C-C' 7350 7340 7330 7320 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.

Valencia Canyon #47A (aka #22SE) APD Data March 7, 2008

820

Location: 720' FSL x 1940' FEL Sec 22, T28N, R4W

County: Rio Arriba

State: New Mexico

GREATEST PROJECTED TD: 6750'

OBJECTIVE: Blanco Mesaverde

APPROX GR ELEV: 7336'

Est KB ELEV: <u>7348' (12' AGL)</u>

#### 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 4475'	4475' to 6750
HOLE SIZE	12.25"	8.75"	8.75° 6.12\$
MUD TYPE	FW/Spud Mud	FW/Polymer/LSND/ Gel Chemical	Air/LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6- 9.20
VISCOSITY	28-32	28-32	45-60
WATER LOSS	NC	NC	8-10

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Switch to LSND/ Gel Chemical mud prior to penetrating the Nacemiento Shale. Air drill production hole unless significant water flows are encountered. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

#### 2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at  $\pm$  360' in a 12-

9.625" casing to be set at  $\pm$  360' in a 12-1/4" hole filled with 9.20 ppg mud

										<u> </u>		
					Coll	Burst						
					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	_ (in)	(in)	Coll	Burst	Ten
0'-360'	360'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	11.73	20.44	30.40

Intermediate Casing:

7" casing to be set at  $\pm$  4475' in a 8-3/4" 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	Burst	Ten
0'-4475'	4475'	23.0#	J-55	ST&C	3270	4360	284	6.366	6.241	1.52	2.03	2.76

Production Casing: 4.5" casing to be set at TD ( $\pm 6750$ ') in 6-1/8" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-6750	6750'	11.6#	J-55	ST&C	4960	5350	154	4.000	3.875	1.53	1.65	1.96

Remarks: Casing strings shall be centralized in accordance with Onshore Order #2 and NTL FRA-90-1.

#### 3. WELLHEAD:

- A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 9-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

## 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  $\pm$  360' in 12-1/4" hole.

162 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft<sup>3</sup>/sk, & 6.70 gal wtr/sk.

Total slurry volume is 225 ft<sup>3</sup>, 100% excess of calculated annular volume to 360'.

B. <u>Intermediate:</u> 7", 23.0#, J-55 (or K-55), ST&C casing to be set at ±4475' in 8.75" hole.

#### LEAD:

±385 sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

#### TAIL:

100 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

Total estimated slurry volume for the 7" production casing is 927 ft<sup>3</sup>.

C. <u>Production:</u> 4.5", 11.6#, J-55 (or K-55), ST&C casing to be set at  $\pm 6750$ ' in 6.125" hole.

±121 sx of Premium Lite (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, glass beads, & LCM mixed at 9.7 ppg, 2.96 ft<sup>3</sup>/sk, 7.75 gal wtr/sx.

Total estimated slurry volume for the 4.5" production casing is 356 ft<sup>3</sup>.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 40%. It will be attempted to circulate cement to the surface on all strings except 4.5". The 4.5" will be designed for 500' of overlap.

EXHIBIT F

#### 5. LOGGING PROGRAM:

- A. Mud Logger: The mud logger, if used, will come on at 2,900' and will remain on the hole until TD. The mud may be logged in 10' intervals.
- B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6750') to the bottom of the intermediate csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6750') to the intermediate casing shoe.

#### 6. FORMATION TOPS:

Est. KB Elevation: 7350'

<b>FORMATION</b>	Sub-Sea	$\underline{\mathbf{MD}}$
Nacimiento	4908	2440
Ojo Alamo SS	3759	3589
Kirtland Shale	3544	3804
Fruitland Formation		
Middle Fruitland Coal	3243	4105
Pictured Cliffs SS	3188	4160
Lewis Shale	2875	4473
Chacra SS**	2102	5246
Cliffhouse SS*	1292	6056
Menefee**	1227	6121
Point Lookout SS*	918	6430
Mancos Shale		
TD	598	6750

<sup>\*</sup> Primary Objective

#### 7. <u>COMPANY PERSONNEL:</u>

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Jerry Lacy	Drilling Superintendent	505-333-3177	505-320-6543
John Klutsch	Project Geologist	817-885-2800	

<sup>\*\*</sup> Secondary Objective

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

# CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS ĆLASS 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





