Form 3160-3 (April 2004) RECENTED

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

IIIN 14 20115

Lease Serial No. NMNM-03554

## DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER of Land Mar agemient

UNITED STATES

7 If Unit or CA Agreement, Name and No. **✓** DRILL REENTER la. Type of work N/A 8 Lease Name and Well No. Oil Well 🗸 Gas Well Type of Well Single Zone ✓ Multiple Zone BREECH C #248F 9 API Well No Name of Operator XTO Energy Inc. 3b Phone No. (include area code) Address 382 CR 3100 10 Field and Pool, or Exploratory Basin Dakota/Blanco Mesaverde / Basih Mance Aztec, NM 87410 505/333-3100 11 Sec., T. R. M. or Blk and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements \*) 665' FNL x 2305' FEL At surface (B) Sec 13, T26N, R6W At proposed prod. zone Same 12 County or Parish 13 State 14 Distance in miles and direction from nearest town or post office\* Approximately 35 miles SE of Bloomfield P.O. RIO ARRIBA NM Distance from proposed\* 17 Spacing Unit dedicated to this well 16 No of acres in lease location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 1760 N/2 320 665' 20 BLM/BIA Bond No on file 18 Distance from proposed location\* 19. Proposed Depth DIST. 3 to nearest well, drilling, completed, 694 77501 UTB000138 applied for, on this lease, ft Elevations (Show whether DF, KDB, RT, GL, etc.) 22 Approximate date work will start\* 23. Estimated duration 6589' Ground Elevation 07/18/2011 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 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) 2. A Drilling Plan. 3 A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification SUPO shall be filed with the appropriate Forest Service Office) Such other site specific information and/or plans as may be required by the

Permitting Tech. Approved by (Signature) Name (Printed/Typed) Date

Name (Printed/Typed)

Malia Villers

Title

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.

Office

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)

25 Signature

Title

This action is subject to technical and precedural review pursuant to 43 CFR 3165.8 and appeal pursuant to 43 CFR 3165,4

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

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

OCT 2 5 2011

TIFŸ AZTEC OCD 24 HRS. NMOCD PRIOR TO CASING & CEMENT

Date

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240 State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

DISTRICT II
1801 W. Grand Avenue, Artesia, N.M. 88210

Submit to Appropriate District Office

**EAST** 

OIL CONSERVATION DIVISION JUN 14 2011

State Lease - 4 Copies Fee Lease - 3 Copies

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

В

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

Farmington Field Offic Fureau of Land Manageme

2305

☐ AMENDED REPORT

RIO ARRIBA

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87606

13

26N

**6W** 

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Numi	er		Pool Code			*Pool Nam	Ð	
30.033.	31075	171	599	B	asin D	aksta		
Property Code				<sup>5</sup> Property			• 1	Fell Number
304751				BREECH	ł C		ļ	248F
OGRID No.				*Operator	Name			Elevation
538D				XTO EN	ERGY			6589'
				10 Surface	Location			
UL or lot no. Sec	tion Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

11 Bottom Hole Location If Different From Surface

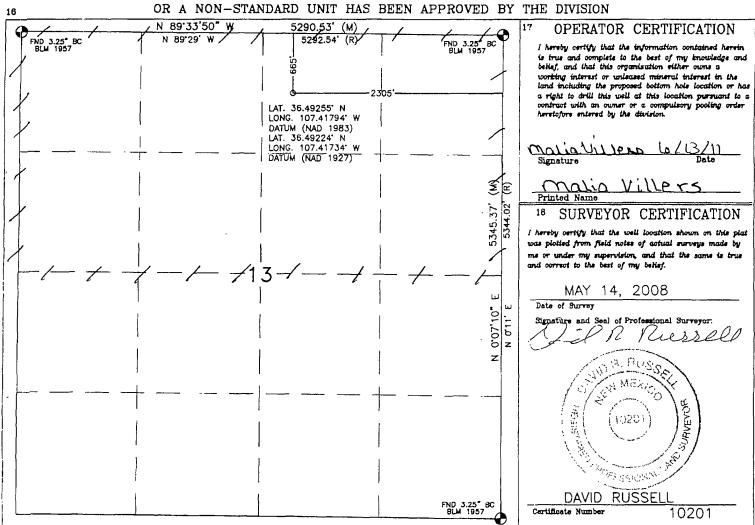
NORTH

665'

bottom note Excation in Different From Surface										
UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County	,
Dedicated Acres			19 Joint or	Infi)]	<sup>14</sup> Consolidation (	Code	<sup>15</sup> Order No.			
N12	32	0								

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



DISTRICT 1 1625 N. French Dr., Hobbs, N.M. 88240

## State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

DISTRICT II 1901 W. Grand Avenue, Artesia, N.M. 88210

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

В

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit to Appropriate District Office State Lease - 4 Copies

**EAST** 

Fee Lease - 3 Copies

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

13

26N

☐ AMENDED REPORT

RIO ARRIBA

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API NUMBER		l boot	>0de		Pool Name	8	
30.039·	21012	7231	19 3	Blanco	mesal	serde_	
Property Code			<sup>6</sup> Property			•	Well Number
304751			BREEC	н с			248F
CGRID No.			*Operator	Name			* Elevation
5380			XTO EN	ERGY			6589'
			10 Surface	Location			
UL or lot no. Section	Township	Range Lot I	dn Feet from the	North/South line	Feet from the	Bast/West line	County

11 Daily II II I I I I Diff I Diff

NORTH

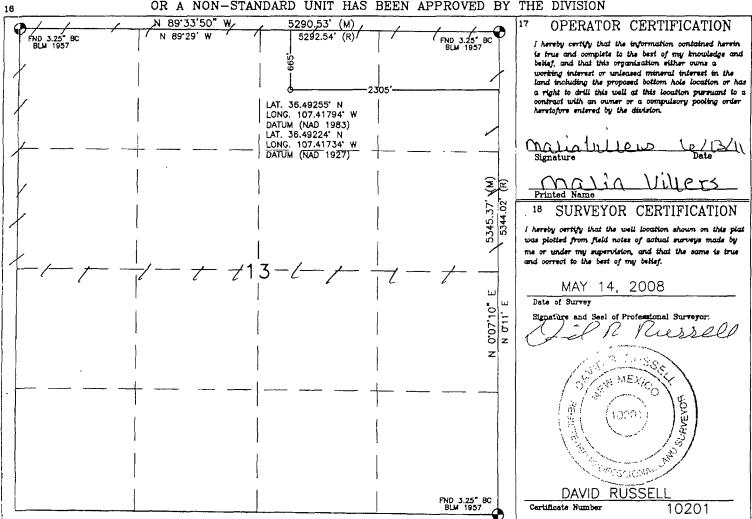
2305'

665'

6W

	"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	
Dedicated Acres			19 Joint or	Infill	14 Consolidation C	ode	15 Order No.			
N/2	32	20								

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



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

#### State of New Mexico Energy, Minerals & Natural Resources Department

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Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

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

☐ AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT

	Nишрет О	1275		*Pool Code			1		Pool Nam	е		
	<u> </u>	1010	191	<u> 232</u>	*Prope	13	asun	$\omega$	ممده	72 -	. v	ell Number
Property Co	_					ECH						248F
30475 10GRID №					* Opera						•	Klevation
5380					XTO ENERGY 6589'							
					10 Surfac	ce L	ocation					
UL or lot no.	Section 13	Township 26N	Range 6W	Lot Idn	Feet from the	he	North/South line NORTH	1	from the 2305'	Bost/Wes EAS		County RIO ARRIBA
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N/2	320	>										
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FND 3:25" BC BLM 1957		N 89.59,			92.54' (R) /	77	FND 3.25° BLM 195	BC	ł			TITIONITON  tion contained herein
						1	DD# 183		is true a	nd complete	to the best	of my knowledge and either owns a
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	1			LAT. 36.49		2 <b>3</b> 05'—		7				location pursuant to a spulsory pooling order
				LONG. 10	7.41794° W		·			entered by		
				DATUM (N. LAT. 36.49		1			000	را ما	110.	10/13/11
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### XTO ENERGY INC.

## Breech C #248F APD Data May 27, 2011

Location: 665' FNL x 2305' FEL Sec 13, T26N, R6W County: Rio Arriba State: New Mexico

GREATEST PROJECTED TD: 7750'

OBJECTIVE: Basin Dakota / Mancos / Mesaverde

APPROX GR ELEV: 6589'

Est KB ELEV: 6601' (12' AGL)

#### 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 7750'
HOLE SIZE	12.25"	7.875"	7.875"
MUD TYPE	FW/Spud Mud	LSND	LSND
WEIGHT	8.6-9.0	8.4-8.8	8.6- 9.8
VISCOSITY	28-32	28-32	45-70
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. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

#### 2. CASING PROGRAM:

Surface Casing: 8.625" casing to be set at  $\pm 360$ ' in a 12.25" hole filled with 9.20 ppg mud

										110		
					Coll	Burst						
ł					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'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	7.950	17.13	28.24

Production Casing: 5.5" casing to be set at TD (±7750') in 7.875" hole filled with 9.20 ppg mud.

					Coll	Burst						
		ı			Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-7750	7750'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.09	1.30	1.68

#### 3. WELLHEAD:

- A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 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: 8.625", 24.0#, J-55, ST&C casing to be set at  $\pm$  360' in 12-1/4" hole.

214 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 297 ft<sup>3</sup>, 100% excess of calculated annular volume to 360'. Surface Casing will be pressure tested to 600 psi for 30 min.

B. <u>Production:</u> 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at  $\pm 7750$ ' in 7.875" hole. DV Tools set @  $\pm 6350$ ' and @  $\pm 3260$ '.

## 1st Stage

#### LEAD:

±70 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.

## 2<sup>nd</sup> Stage

#### LEAD:

±241 sx of Type III or equivalent cement with 8% gel & LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sx.

#### TAIL:

100 sx Type III neat mixed at 14.5 ppg, 1.39 cuft/sx, 6.3 gal/sx.

## 3<sup>rd</sup> Stage:

#### LEAD:

±262 sx of Type III or equivalent cement with 8% gel & LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sx.

#### TAIL:

100 sx Type III neat mixed at 14.5 ppg, 1.39 cuft/sx, 6.3 gal/sx

Total estimated slurry volume for the 5-1/2" production casing is 1862 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.

## 5. LOGGING PROGRAM:

A. Mud Logger: None.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (7750') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7750') to 3,000'.

## 6. FORMATION TOPS:

Est. KB Elevation: 6601'

FORMATION	Sub-Sea	MD	FORMATION	TV Sub-Sea	MD
Naciemento	5190	1411			
Ojo Alamo SS	4123	2478	Tocito	-207	6808
Kirtland Shale	3978	2623	Greenhorn	-622	7223
Fruitland Formation	3885	2716	Graneros	-685	7286
Lower Fruitland Coal	3545	3056	Dakota 1*	-710	7311
Pictured Cliffs SS	3525	3076	Dakota 2*	-759	7360
Lewis Shale	3392	3209	Dakota 3*	-800	7401
Chacra SS	2627	3974	Dakota 4*	-836	7437
Cliffhouse SS*	1844	4757	Dakota 5*	-874	7475
Menefee**	1747	4854	Dakota 6*	-924	7525
Point Lookout SS**	1296	5305	Burro Canyon	-984	7585
Mancos Shale	908	5693	Morrison*	-1096	7697
Gallup	199	3402	TD	-1149	7750

<sup>\*</sup> Primary Objective

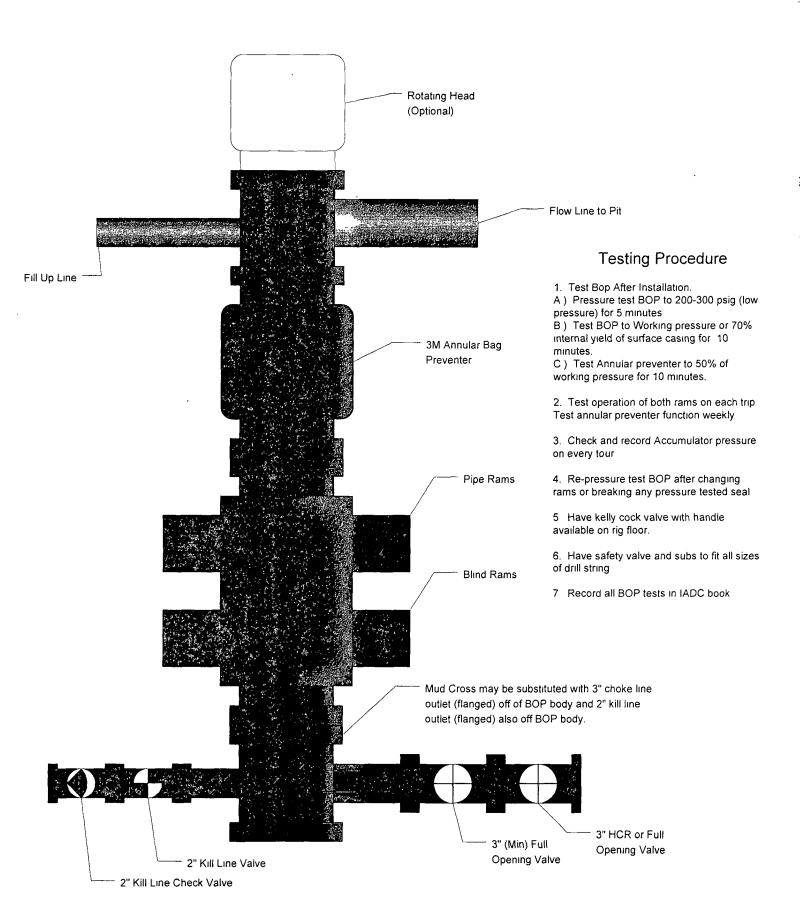
\*\*\*\* Maximum anticipated BHP should be <2,500 psig (<0.30 psi/ft) \*\*\*\*\*

#### 7. COMPANY PERSONNEL:

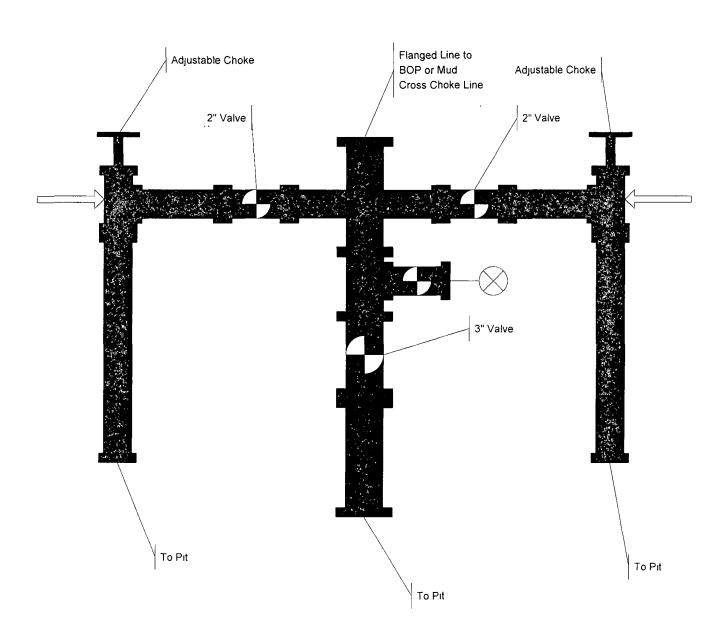
Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
John Klutsch	Project Geologist	817-885-2800	

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

	KTO Energy	
3M BOP Stack		



	XTO Energy	
3M Choke		-
Manifold		)



## **DRILLING CONDITIONS OF APPROVAL**

Operator:

XTO Energy Inc.

Lease No.:

NMNM-03554

Well Name:

Breech C #248F

Well Location:

Sec.13, T26N, R6W; 665' FNL & 2305' FEL

To meet minimal requirements, XTO is to change the bottom 250 feet of production casing to 17 lb/ft casing. This is to meet our requirements for a collapse factor of 1.125.





After hour contact: Troy Salyers 505-360-9815