Form 3160-3 (April 2004)

## UNITED STATES DEPARTMENT OF THE INTERIORBUREAU OF LAND MANAGEMENT

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

APPLICATION FOR	5, Lease Ser		Con sand					
1a. Type of Work DRILL								
	- am 3 23							
lb. Type of Well Oil Well 🕱 Gas V	Oil Well Gas Well Other (III) At Single Zone Multiple Zone							
2. Name of Operator		RECEIVED	N/A 8. Lease Nar	me and Well No.	rose cannot be considered to the constant of t			
XTO Energy Inc.		TANKINGTON NM	New Me	xico Federal N #3E	Edge Casa			
Ba. Address	•	•	9. API Well					
2700 Farmington Ave., Bldg. K. St. Location of Well (Report location clearly and in					<del></del>			
At surface 1810' FNL x 2455' FWL	in Sec 18, T30N	-	10. Field and Basin	Pool, or Exploratory				
1010. EMT X 5433. EMT	III Sec 16, 130N	, KIZN		R., M., or Blk. and Survey o	r Area			
At proposed prod. zone SAME			(F) Se	c 18, T30N, R12W				
4. Distance in miles and direction from nearest town	or post office*		12. County or	Parish 13. State				
Approximately 3 miles	Northwest of Fan	mington, NM post office	San Juan	NM				
5. Distance from proposed* location to nearest		16. No. of Acres in lease	17. Spacing Unit de	dicated to this well				
property or lease line, ft.  (Also to nearest drg. unit line, if any)	.810'	1897.09		320 N/2				
<ol> <li>Distance from proposed location* to nearest well, drilling, completed,</li> </ol>		19. Proposed Depth	20. BLM/BIA Bon	d No. on file				
applied for, on this lease, ft. 1560	1	7000 '	τ	JIB-000138				
1. Elevations (Show whether DF, KDB, RT, GL, etc.	<b>.</b>	22. Approximate date work will star	nated duration					
5976' Ground Elevation		August 2006		2 weeks				
he following, completed in accordance with the req  Well plat certified by a registered surveyor.  A Drilling Plan  A Surface Use Plan (if the location is on National SUPO shall be filed with the appropriate Forest	al Forest System Lands, the	4. Bond to cover the operation of them 20 above). 5. Operator certification. 6. Such other site specific in authorized of the TION 1	ons unless covered b	y an existing bond on file (so acac haryba requiremby the JEVE THE LESSEE A	IIS AND			
itle	_	· AUTHUR	ZATION REQU	TANG ANY OTHER IRED FOR OPERATI AN LANDS 06/13/06	IONS			
Regulatory Compliance Tech	/	(D) 100						
pproved by (Signautre)	lielog "	ame (Printed/Typed)		Date /0/3/02	} ·			
AF.	-N	ffice F/O						
Application approval does not warrant or certify the onduct operations thereon. Conditions of approval, if any, are attached.					<del></del>			
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Se tates any false, fictitious or fraudulent statements or			lly to make to any de	partment or agency of the U	Jnited			
	NS AUTHORIZED ARE IANCE WITH ATTACHED MENTS".	This action is subject to procedural review pursuand appeal pursuant to	ıant to 43 CFR 3165	8 <sup>3</sup>				
OCT 0 8 2008	DN	/RA	<b>\//</b>					

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

DISTRICT L 1625 N. French Dr., Hobbs, N.M. h5240

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

Form C-102 Revised June 10, 2003

DISTRICT II 1301 W. Grand Ave., Artegia, N.M. 88210

Submit to Appropriate District Office State Lease - 4 Copies

DISTRICT III 1000 Rin Brazos Pd., Asten, N	M 87410		12	29 South St. Santa Fe, NM	Francis Dr. 87505			Lease - 4 Copies Lease - 3 Copies
DISTRICT IN 1220 South St. Francis Dr., Se	nto le Nu S/°	ะกร						MENDED REPORT
1220 33010 11 11 1151 (11 , 10)			)CA HO	A AND AC	REAGE DEDI	CATION PL	ΑT	
30-045-33			Pool Code 1579		BASIN.	DAKOTA	F 1000 1 1 10 10 10 10 10	
Property Code	== 1			<sup>5</sup> r'roperty N				• Well Number
33982 NEW MEXICO FEDERAL N  Operator Name								3!" Flevation
5380 XTO ENERGY INC.								5976
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#### XTO ENERGY INC.

#### New Mexico Federal N #3F APD Data June 8, 2006

Location: 1810' FNL x 2455' FWL Sec 18, T30N, R12W County: San Juan State: New Mexico

GREATEST PROJECTED TD: 7070' OBJECTIVE: Basin Dakota

APPROX GR ELEV: <u>5976'</u> Est KB ELEV: <u>5988' (12' AGL)</u>

#### 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 7070
HOLE SIZE	12.25"	7.875"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer	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. 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 12-1/4" 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'-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 ( $\pm 7070$ ') in 7-7/8" 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'-7070	7070'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.19	1.42	1.84

#### 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'.

B. <u>Production:</u> 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at  $\pm 7070$ ' in 7.875" hole. DV Tool set @  $\pm 4200$ '

1st Stage

#### LEAD:

±231 sx of Premium Lite HS (Type III/Poz/Gel) with 2% salt, 1/4 pps cello, 0.2% dispersant, 0.5% fluid loss & 2% LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

#### TAIL:

150 sx Type III with 5% bonding additive, 1/4 pps cello, 2% LCM, 0.3% dispersant & 0.2% fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2<sup>nd</sup> Stage

#### LEAD:

 $\pm 350$  sx of Type III with 8% gel, 1/4 pps cello & 2% 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 1725 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: The mud logger will come on at 2,900' and will remain on the hole until TD. The mud will be logged in 10' intervals.
- B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (7070') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7070') to 3,000'.



#### **FORMATION TOPS:**

Est. KB Elevation: 5988'

FORMATION	Sub-Sea Elev.	WELL DEPTH	FORMATION	Sub-Sea Elev.	WELL DEPTH
Ojo Alamo SS	5436	552	Gallup Ss	250	5,738
Kirtland Shale	5331	657	Greenhorn Ls	-491	6,479
Farmington SS	5280	708	Graneros Sh	-546	6,534
Fruitland Formation	4072	1,916	1 <sup>ST</sup> Dakota Ss*	-596	6,584
Lower Fruitland Coal	3972	2,016	2 <sup>ND</sup> Dakota Ss	N/A	
Pictured Cliffs SS	3896	2,092	3 <sup>RD</sup> Dakota Ss*	-662	6,650
Lewis Shale	3772	2,216	4 <sup>TH</sup> Dakota Ss	N/A	
Chacra SS**	2835	3,153	5 <sup>TH</sup> Dakota Ss**	-714	6,702
Cliffhouse SS	2192	3,796	6 <sup>TH</sup> Dakota Ss**	-754	6,742
Menefee*	2165	3,823	Burro Canyon Ss**	-837	6,825
Point Lookout SS*	1539	4,449	Morrison Fm**	-880	6,868
Mancos Shale	1169	4,819	Total Depth	-1082	7,070

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

Name	Title	Office Phone	Home Phone
John Egelston	Drilling Engineer	505-564-6734	505-330-6902
Jerry Lacy	Drilling Superintendent	505-566-7917	505-320-6543
Reed Meek	Project Geologist	817-885-2800	817-427-2475

JWE 6/8/06

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

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

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

- 1. Stake all lines from choke manifold to pit.
- 2. Pressure test choke monifold after installation.
- 3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

## TESTING PROCEDURE





