Form 3160-3 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0136 Expires January 31, 2004

APPLICATION FOR PERMI	T TO DRILL C	R REENTEF	· THE ALL	VIII	SF - 07			
la. Type of Work	21 2	6.If Indian, Al 2: 2음	lotee or T	ribe Name				
lb. Type of Well Oil Well	Other	Single Zone	Multiple Zon	_ 		Agreemer	nt Name and No.	
2. Name of Operator			470 (3.48)	don	8. Lease Name	and Well	No.	
XTO Energy Inc.					Bolack			
3a. Address			No (include area co	de)	9. API Well No	0.		
2700 Farmington Ave., Bldg. K. Ste 1	Farmington,	MM 20 19 5	0 (1 (2 /) 3	_			3205	
4. Location of Well (Report location clearly and in accordance 1075). Fall we 1690. Fall in Sec.		(56)	SA TO	11	0.Field and Po Basin F:			
/ Atsurface 1075' FNL x 1690' FWL in Sec	: 15, T27N, 1	VACING JA	N 2002 3	1			lk. and Survey or	
At proposed prod. zone	·		1071/2 E	. Î	Cec 15,	T27N	-	
14. Distance in miles and direction from nearest town or post of	office*	2	Taka, 2		2. County or P		13.State	
15 miles Southeast of t		NM DOST	office	/ ,	an Juan		NM	
15. Distance from proposed*	2.00.2.40	16 No of Acre			ing Unit dedic	cated to the		
location to nearest		~ ~ \&&/.	3 - 10 8 32	•	_			
property or lease line, ft. 943 ' (Also to nearest drg. unit line, if any)	ì	46	2401.76		320	acres	W/2	
		19. Proposed D	enth	20 DI I	M/BIA Bond	No. on fil		
8 Distance from proposed location* to nearest well, drilling, completed,		19.F10posed D	ерш	20.BL	WDIA DONG	NO. OH H	C	
applied for, on this lease, ft.		2.3	375 '					
·				<u> </u>	I aa E e			
21. Elevations (Show whether DF, KDB, RT, GL, etc.			te date work will star	rt*	23. Estima	ted durati	ion	
6,296' Ungraded Ground Level		W:	inter 2004		2 weeks			
	24	Attachments						
The following, completed in accordance with the requirements	s of Onshore Oil a	nd Gas Order No	o. 1, shall be attached	to this f	orm:			
		1, 5			• •			
Well plat certified by a registered surveyor. A Drilling Plan			to cover the operat 20 above).	ions unie	ss covered by	an existin	g bond on the (see	
3. A Surface Use Plan (if the location is on National Forest	System Lands, the		ator certification.					
SUPO shall be filed with the appropriate Forest Service C	Office).		other site specific in	formatio	n and/or plans	as may b	e required by the	
		autho	orized officer.					
25. Signuature	N:	ame (Printed/Ty)	ped)			Date	-	
Metallon	J	effrey W. 1				12/03/03		
Title		 						
Drilling Engineer (<u>-</u>		111111111111111111111111111111111111111	
Approved by (Signautre) Devid J. Mankiewicz	N	ame (<i>Printed/Ty</i>	ped)			Date (JAN 20 20	
Title	O	ffice				ļ		
Application approval does not warrant or certify that the approval	plicant holds legal	or equitable tit	le to those rights in	the subje	ct lease which	n would e	ntitle the applicar	
conduct operations thereon. Conditions of approval, if any, are attached.								
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 121				ılly to ma	ake to any dep	artment o	r agency of the U	
States any false, fictitious or fraudulent statements or represer	ntations as to any r	natter within its	jurisaiction.					
*(Instructions on Reverse)					i i o d			
DRILLPACE TO LOATE OF CHARGING LOADS			This action is sul propedural revie	w gursu	ant to 43 CFR	3165.3		
SUBJECT TO OUR WAS SELECTED ATTAIN			and appeal pure	uan' to r	13 OFR 3165.4	\$		
"GENERAL REQUIREMENTS",								
	ri e	J I						
				- 1				

DISTRICT | P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD, Arlesia, N.M. 88211-0719

OIL CONSERVATION DIVISION

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

P.O. Box 2088 Santa Fe, NM 87504-2088

DISTRICT IV PO Box 2088, San	nta Fe, NM :	875042088		. S	anta te, NM 8	7504-2088] AMEN	NDED REPORT	
٠.			WELL L	OCATIO	N AND AC	REAGE DED	CATION PL	_AT			
1API	Number			² Pool Code			Pool Name	. \	^ ^ ~	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ 	
*Property Code Property Name * Well Number										(all Morahan	
*Property Co	*Property Code										
ZOCRID No											
OGRAD NO	, _M		•		XTO ENERG				}	Elevation 6296	
170,10	(b, 1)	·		<u> </u>				1			
	¹⁰ Surface						·			· -	
UL or lot no.	or lot no. Section Township Range Lot Idn Feet from the C 15 27-N 11-W 1075			North/South line NORTH	Feet from the 1690	East/We	est line EST	SAN JUAN			
	1 .5	27-14	1	om Hole	L	f Different Fro	L	l		<u> </u>	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/W	est fine	County	
- {					1		1				
12 Dedicated Acres	\$	13	Joint or Infill		¹⁴ Consolidation C	ode	¹⁸ Order No.	<u> </u>			
330	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	12	$\overline{}$								
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						EEN APPROVED					
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CALC'D. G	ORNER				E	K004 🗟					
	LAT: 36'34'46" N. (NAD 83)						ļ				
LONG:10759'40' W. (NAD 83)					Carry 13						

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and the second				1	ار و	WITNESS CORNER FND-2 1/2" BC 1913 GLO		POFES	SIL		
garage garage				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		S 00-01' E	_ Ψ	. 14	827	7	
CALC'D. CORNER		.4	5 89 5273	751' W .4' (M)		13.2' (M)	Certificate I				
TO S. COMMEN	1					CALC'D. CORI	VER A				

XTO ENERGY INC.

DRILLING PROCEDURE

Boalck "15" #3 Basin Fruitland Coal December 4, 2003

Location: 1075' FNL & 1690' FWL, Sec 15, T27N, R11W County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 2,375' OBJECT

OBJECTIVE: Fruitland Coal

GR ELEV: 6,296'

1. MUD PROGRAM:

INTERVAL	0'-200'	200'-TD
HOLE SIZE	8-3/4"	6-1/4"
MUD TYPE	FW/Native	FW/Polymer
MUD WEIGHT, ppg	8.6-9.0	8.6-9.1
VISCOSITY, sec/qt	28-32	28-33
WATER LOSS, cc	NC	NC

Remarks: Drill the surface hole with fresh water. Run and cement 7" surface casing, circulating cement to surface. NU and test BOP equipment, then drill out with fresh water. Use polymer sweeps as needed for hole cleaning. At TD, sweep the hole prior to TOH to log.

2. CASING PROGRAM:

Surface Casing: 7" casing to be set at ± 200 ' in 8.8 ppg mud.

		-			Coll	Burst						
		Wt			Rating	Rating	Jt Str	ID	DD	SF	SF	SF
Interval	Length	(ppf)	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Tension
0'-200'	200'	20#	J-55	STC	2,270	3,740	234	6.456	6.331	9.99	4.59	58.5

Optimum makeup torque for 7" 20#, J-55, STC casing is 2,340 ft-lbs (Min - 1,760 ft-lbs, Max - 2,930 ft-lbs).

Production Casing: 4-1/2" casing to be set at $\pm 2,375$ ' in 8.8 ppg mud.

					Coll	Burst						
		Wt			Rating	Rating	Jt Str	ID	DD	SF	SF	SF
Interval	Length	(ppf)	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Tension
0'-TD	2,375'	10.5#	J-55	STC	4,010	4,790	132	4.052	3.927	3.57	3.33	5.24

Optimum makeup torque for 4-1/2", 10.5#, J-55, casing is 1,320 ft-lbs (Min - 990 ft-lbs, Max - 1,650 ft-lbs).

Capacity of 7", 20# casing is: 0.04048 bbl/ft Capacity of 4-1/2", 10.5# casing is: 0.01595 bbl/ft

3. WELLHEAD:

Casinghead: Larkin Fig 92 (or equivalent) 2,000 psig WP (4,000 psig test) with 7", 8rd pin on

bottom and 8-5/8" API Modified 8rd thread on top.

Tubinghead: Larkin Model 612 (or equivalent) 2,000 psig WP (4,000 psig test) with 4-1/2", 8rd

bottom thread and 8-5/8" 8rd API Modified top body thread, 4.090" minimum bore.

4. **CEMENT PROGRAM:**

A. Surface: 7", 20#, J-55, STC casing at \pm 200'.

Lead: 75 sx Type III cement (or equivelent) containing ¼ pps celloflake, 2% CaCl₂ (mixed at 14.6 ppg, 1.39 ft³/sk, 6.67 gal wtr/sk).

Total slurry volume is 104.25 ft³, 250% excess of calculated annular volume required to circulate cement to surface.

B. Production: 4-1/2", 10.5#, J-55, STC casing at $\pm 2,375$ '.

<u>Lead:</u> 150* sx of Type III cement containing 8% gel, 1/4 pps Celloflake & 2% Phenoseal (mixed at 11.4 ppg, 3.03 ft³/sk, 18.51 gal wtr/sk).

Tail: 75 sx Type III cement containing 1% CaCl2, 1/4 pps Celloflake & 2% Phenoseal (mixed at 14.5 ppg, 1.41 ft3/sk, 6.72 gal wtr/sx).

Total estimated slurry volume is 560 ft^3 , $\pm 100\%$ excess of calculated annular volume required to circulate cement to surface.

* Actual cement volumes will be determined using log caliper volume plus 40% excess.

5. **DRILLING HAZARDS:**

- H₂S or other Poisonous Gases: No formations known to contain H₂S or any other poisonous gases will be penetrated with this wellbore.
- Abnormal Pressures: No overpressured zones are known to exist or are anticipated to be encountered during the drilling of this well.
- Lost Circulation: Seepage and/or lost circulation may be encountered below surface casing and can be controlled with conventional lost circulation materials added to the mud system.

6. **LOGGING PROGRAM:**

Array Induction/DFL/GR/SP/Cal DSN/Spectral Density/GR/Cal/Pe

TD to bottom of surf csg. TD to bottom of surf csg.

BOP SCEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL **PRESSURE**

1. Test BOP after installation:

Pressure test BOP to 200-300 psig (low pressure) for 5 min.

Test BOP to Working Press or to 70% internal yield of surf csg (10 min).

