Figm 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 PERMIT TO D	RILL OR F	REENTER		Lease Serial No NM - 02050			
Type of Work X DRILL R	EENTER	TO THE PROPERTY OF THE PROPERT		f.Indian, Allote	e or Tribe Name		
Type of Well Oil Well Gas Well Other	X Si	ngle Zone Multiple Zone	e 7.1	_	eement Name and No.		
Name of Operator		ANT PRO	8.1	Lease Name and			
TO Energy Inc. Address	. 1	3b/ Phone No. (include area co	(a)		errment "S" #3		
2700 Farmington Ave., Bldg. K. Ste 1 Farmin		//\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N   9.4	API Well No.	45 3204		
Location of Well (Report location clearly and in accordance with		rements)*.		Field and Pool,			
At surface 925' FSL x 1,255' FEL in Sec 26,	· 1	A Property of			tland Coal		
923 Fall X 1,233 Fall III Sec 20,	120N, KIII  -				, or Blk. and Survey or A		
At proposed prod. zone	,	L	OF IT	Sec 26, ]	28N, R11W		
.Distance in miles and direction from nearest town or post office*		Van on	12.0	County or Paris	h 13.State		
15 miles Southeast of the Bl	comfield,	NM post office	Sat	n Juan	NIM		
. Distance from proposed*		No. of Acres in lease	17. Spacin	g Unit dedicate	d to this well		
location to nearest property or lease line, ft. 925'	1				_		
(Also to nearest drg. unit line, if any)		+-640		320 ac	res <b>\$</b> /2		
Distance from proposed location* to nearest well, drilling, completed,	19.1	Proposed Depth	20.BLM/	BLM/BIA Bond No. on file			
applied for, on this lease, ft.		1,800'					
. Elevations (Show whether DF, KDB, RT, GL, etc.	22.	Approximate date work will star	rt*	23. Estimated duration			
5,631' Ungraded Ground Level		Winter 2004			2 weeks		
ne following, completed in accordance with the requirements of Onsh		achments as Order No. 1, shall be attached	l to this for	 m:			
well plat certified by a registered surveyor.  A Drilling Plan  A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office).	nore Oil and G	4. Bond to cover the operate Item 20 above). 5. Operator certification. 6. Such other site specific in	ions unless	covered by an e			
Well plat certified by a registered surveyor.  A Drilling Plan  A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office).	nore Oil and G	4. Bond to cover the operation of the statem 20 above). 5. Operator certification. 6. Such other site specific in authorized officer.	ions unless	covered by an e	may be required by the		
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ORM LING OPERATIONS ANTHOR/TED ART SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

APD/ROW

DISTRICT I 1825 N. French Dr., Hobbs, N.M. 88240

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

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, N.M. 88210

DISTRICT IV

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

2040 South Pacheco, Santa Fe, NM 87505

API Number

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

Submit to Appropriate District Office State Lease — 4 Copie

<sup>3</sup>Pool Name

State Lease — 4 Copies Fee Lease — 3 Copies

AMENDED REPORT

20040	-36	1 40		100	1	<u> </u>	7 7	<u>1U1</u>	<u> 7101</u>		-OHL
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OGRID No.					*Operator N		· · · · · · · · · · · · · · · · · · ·			Elevation	
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	urface										
UL or lot no.	Section	Township	Range	om Hole	Feet from the	North/South line	Feet fi	rom the	East/West	t line	County
12 Dedicated Acres	<u> </u>	<u> </u>	13 Joint or I	nfili	14 Consolidation Co	xde	15 Order	· No.	l		<u>, l</u> ,
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				$\cdot \parallel \cdot \rangle$				was plotted	from field note	se of actua	l surveys made by
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#### **XTO ENERGY INC.**

# DRILLING PROCEDURE Ohio C Government "S" #3 Basin Fruitland Coal December 2, 2003

Location: 925' FSL & 1,255' FEL, Sec 26, T28N, R11W County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 1,800' OBJECTIVE: Fruitland Coal GR ELEV: 5,631'

#### 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  $\pm$  200' in 8.8 ppg mud.

					Coll	Burst						
		Wt	i		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  $\pm 1,800$ ' 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
ĺ	0'-TD	1,800'	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% CaCl<sub>2</sub> (mixed at 14.6 ppg, 1.39 ft<sup>3</sup>/sk, 6.67 gal wtr/sk).

Total slurry volume is 104.25 ft<sup>3</sup>, 250% excess of calculated annular volume required to circulate cement to surface.

B. Production: 4-1/2", 10.5#, J-55, STC casing at  $\pm 1,800$ '.

<u>Lead:</u> 125\* sx of Type III cement containing 8% gel, 1/4 pps Celloflake & 2% Phenoseal (mixed at 11.4 ppg, 3.03 ft<sup>3</sup>/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 477  $ft^3$ ,  $\pm 100\%$  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:**

- H<sub>2</sub>S or other Poisonous Gases: No formations known to contain H<sub>2</sub>S 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.

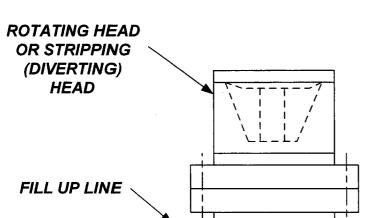
#### 6. **LOGGING PROGRAM:**

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).

- 2. Test operation of (both) rams on every trip.
- 3. Check and record Accumulator pressure on every tour.
- 4. Re-pressure test BOP stack after changing out rams.
- 5. Have kelly cock valve with handle available.
- 6. Have safety valve and subs to fit all sizes of drill string.

