Form 3160-3 (July 1992)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR

SUBMIT	N TRIPLICATE*
(Other	instructions on

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

22. APPROX. DATE WORK WILL START\*

5.	LEASE I	DESIGNATION	AND SERIAL NO.
	CE -	077092	*

**BUREAU OF LAND MANAGEMENT** 

REEMENT NAME	
	٠ , ح
	-/-/01/

RUPEAU OF LAND MANA	CEMENT		31 - 077002				
	OF WORK  OF WELL  GAS X OTHER  OF OPERATOR  Incregy Inc.  SSS AND TELEPHONE NO.  Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401  TON OF WELL (Report location clearly and in accordance with any State requirements.*)						
APPLICATION FOR PERMIT TO D	rn Z						
a. TYPE OF WORK			7. UNIT AGREEMENT NAME				
DRILL X DEEPEN L	그 070 FARNIN	iaton,		22816			
	SINGLE MULTIPL ZONE ZONE	EΧ	8. FARM OR LEASE NAME, V Snyder Gas Com				
NAME OF OPERATOR			•				
XTO Energy Inc.	150074705	-	9. API WELL NO.				
B. ADDRESS AND TELEPHONE NO.		7/3	300453	<u> 1385                                    </u>			
2/00 Farmington Ave., Bldg. K. Ste I Farmingtor		4. 1	10. FIELD AND POOL, OR W.				
		·	Blanco Mesavero	le			
At surface	Prince Prince		Basin Dakota				
At proposed prod. zone			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA				
			Sec 19, T29N, F	KO9W			
4. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE			12. COUNTY OR PARISH	13. STATE			
Approx 5 miles southeast of the Blanco NM Post (	Office (South of river)		San Juan	NM			
5. DISTANCE FROM PROPOSED* LOCATION TO NEAREST	16. NO. OF ACRES IN LEASE		ACRES ASSIGNED				
PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) 700'	409.24	TOTHIS		109.24 MV			
8. DISTANCE FROM PROPOSED LOCATION*	19. PROPOSED DEPTH	20. ROTARY	OR CABLE TOOLS				
TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 800 '	6,950'	0,-6	,950' w/Rotary To	ols			

5,652 Ground le	vel	In 30 days				
23.	I	ROPOSED CASING AND C				
SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT		
12-1/4"	9-5/8", H-40	32.3#	265'	140 sx Class "B"		
8-3/4"	7", J-55	20.0#	2,250'	200 sx Liteweight cement		
6-1/4"	4-1/2", J-55	10.5#	6,950'	390 sx Type III & Premium Lite		

XTO Energy Inc. plans to drill the above mentioned well as described in the enclosed Surface Use Program.

Note: An El Paso Field Services Well tie plat is attached in order to obtain ROW with the proposed well location.

This action is subject to technical and procedural review pursuant to 43 CFR 3165.8 and appeal pursuant to 43 CFR 3165.4

21. ELEVATIONS (Show whether DF,RT, GR, etc.)

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

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: deepen directionally, give pertinent data on substitute loc	If proposalis to deepen, give dataon presentproductivezone and ations and measured and true vertical depths. Give blowout prevents are the prevention of the proposal statement of the proposal statemen	proposednew productivezone. If proposalis to drill or enter program, if any.
signed Aufatte	m <sub>TTLE</sub> <u>Drilling Engineer</u>	DATE 2/5/03
(This space for Federal or State office use)	APPROVAL DATE	
	olicant holds legal or equitable title to those rights in the subject lease which	would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:		r
lei Denii J. William	?@wic₹	FEB 25 in
APPROVED BY	TITLE —	DATE —

\*See Instructions On Reverse Side Title 18 U.S.C. Section 1001, makes it a crime for any personknowingly and willfully to make to any departmentor agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

ISIRICT I 625 N. French Dr.	, Hobbs, N.I	d. 88240 -	Enc	Srgy, Mine	itate of Ne rols & Natural	w Mexico Resources De	epartment		Re	vised Au	Form C-102 gust 15, 2000
ISTRICT II 11 South First, Ar	tesia, N.M.	B8210		OIL C	ONSERVATI	ON DIVISIO	N	Submit	to Appro	priate Di ate Leas Fee Leas	strict Office se - 4 Copies se - 3 Copies
ISTRICT IV 040 South Pache		e, NM 87505			- Santa Fe, N	M 87505				] AMEN	DED REPORT
7 6 - 1	Number	1295		<sup>2</sup> Pool Code	N AND AC	CREAGE D		<sup>3</sup> Pool Name	) :		
Property Co	5-2	1207		<u>71599</u>	<sup>8</sup> Property		15/t2)	IN AJA	<u>KUI H</u>		il Number
7000 No.					SNYDER GAS  *Operator  XTO ENERG	Name					1F. Elevation 5652°
ושוט					<u> </u>	Location					3032
UL or lot no.	Section 19	Township 29-N	Range 9W	Lot Idn	Feet from the 2200	North/South SOUTH	line Feet	from the 700	East/Wes	•	County SAN JUAN
UL or lot no.	Section	Township	11 Botto Range	om Hole	Location Feet from the	If Differen		Surface from the	East/Wes	st line	County
<sup>12</sup> Dedicated Acres		14.5	13 Joint or In	fil	<sup>14</sup> Consolidation (	code	18 Ord	ler No.			
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			$\overline{}$	19	res 1	FD.	CORNER 3 1/4" BC BLM 1950	Title Date		- 5-03	
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DISTRICT 1	18240 Fnergy Mine	State of Nev	y Mexico	Cont	Revised /	Form C-1(
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811 South First, Artesia, N.M. COZIN DISTRICT III 1999 Rio Brazas Rd., Aztec, N.M.	01L C	CONSERVATION SOUTH	ON DIVISION	the second secon	State Le Fee Le	ase — 4 Copic ase — 3 Copi
DISTRICT IV 2040 South Pacheco, Santa Fe, NM	87410 OIL C	Santa Fe, NM	87505		- D AME	NDED REPOI
	WELL LOCATIO		REAGE DEDI			
30-045-313	385 Pool Code 72319		BU	*Pool Name	SAUERDE	
<sup>4</sup> Property Code		<sup>8</sup> Property N	lame		• ٧	Well Number
OGRID No.		SNYDER GAS	COM B			1F.
167067		<u> </u>	Y INC.			5652'
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	<sup>11</sup> Bottom Hole		If Different Fro		- Air-at Rea	
UL or lot no. Section To	Township Range Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
To Dedicated Acres	<sup>13</sup> Joint or Infili	<sup>14</sup> Consolidation Co	ode	<sup>15</sup> Order No.	<del></del>	
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	L BE ASSIGNED TO TH OR A NON-STANDARD					ONSOLIDAT
16				17	OPERATOR (	CERTIFICATI
		\		le true or	certify that the information and complete to the best of	ion contained herein
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	SEC19					Ά
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`		18 cm	762' LOT	l hereby cer	ertify that the well location of from field notes of actual	ual surveys made by
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9- 831 E00Z			6	· 보위	- Lu sel at Broker	siona Surveyor:
- CWC				O    \vec{y}		
HOBA		SEC. CORNER FD 3 1/4" BC	LOT		No. of the second	\$ P
	QTR. CORNER	BLM_1950			14827	$\mathcal{J}$
	FD 3 1/4" BC N 8 BLM 1951	89-01-59 W 2923.90'		Certificate		

### Snyder Gas Com "B" #1F **APD Data February 5, 2003**

XTO ENERGY INC.

Surface Location: 2,200' FSL & 700' FEL, Sec 19, T29N, R09W County: San Juan State: New Mexico

TOTAL DEPTH:  $\pm 6,950$ 

OBJECTIVE: Dakota/Mesaverde

GR ELEV: 5,652'

Est KB ELEV: 5,665' (13' AGL)

#### **MUD PROGRAM:**

INTERVAL	0' to 265'	265' to 2,250'	2,250' to TD
HOLE SIZE	12-1/4"	8-3/4"	6-1/4"
MUD TYPE	FW/Native Mud	FW/Polymer	Air/Foam
WEIGHT	8.6-8.8	8.6-9.0	
VISCOSITY	28-32	29-34	
WATER LOSS	NC	NC	

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. RU air compressors after setting the intermediate csg. Drill with air or foam to TD.

#### **CASING PROGRAM:**

Surface Casing:

9-5/8" casing to be set at  $\pm$  265' in 8.6 ppg mud

							110	_				
					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'-265'	265'	36.0#	J-55	STC	2020	3520	394	8.921	8.765	22.20	29	41.30

32.3世

Intermediate Casing:

7" casing to be set at  $\pm 2,250$ ' in 9.0 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'- 2,250'	2,250'	20.0#	J-55	STC	2270	3740	234	6.456	6.331	2.16	3.55	3.71

**Production Casing:** 

4-1/2" casing to be set at 6.950' in air.

	on Caomig.			*******		0,750 11.	*					
					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'-	6,950'	10.5#	J-55	STC	4010	4790	132	4.052	3.927	1.33	1.20	1.90
6,950'				·								

## Drilling Prognosis Page 2 of 3

#### 3. WELLHEAD:

A. Bradenhead:

9-5/8" x 7" 2,000 psig WP (4,000 psig test).

Casinghead:

7" x 4-1/2" 3,000 psig WP (6,000 psig test).

# 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:

9-5/8", 32.3#, H-40, STC casing to be set at  $\pm$  265'.

<u>Lead:</u> 140 sx of Class "B" (Standard) cement containing 2% CaCl<sub>2</sub>, ¼ pps celloflake, mixed at 15.6 ppg, 1.18 ft<sup>3</sup>/sk, & 5.20 gal wtr/sk.

Total slurry volume is 166 ft<sup>3</sup>, 100% excess of calculated annular volume to 265'.

B. Intermediate:

7", 20.0#, J-55, STC casing to be set at  $\pm 2,250$ '.

<u>Lead:</u> 150 sx of Type III cement containing ±8% gel, ½ pps celloflake and 2% CaCl2 mixed at 11.4 ppg, 3.03 ft<sup>3</sup>/sk, 18.51 gal wtr/sx.

<u>Tail:</u> 50 sx of Type III cement containing ¼ pps celloflake and 2% CaCl2 mixed at 14.5 ppg, 1.39 ft<sup>3</sup>/sk, 6.80 gal wtr/sx.

Total slurry volume is 524 ft<sup>3</sup>, circulated to surface. This value is 50% (excess) over gage hole volume.

C: Production:

4-1/2", 10.5#, J-55, STC casing to be set at  $\pm 6,950$ '.

We plan to cement the production casing in one stage. Prior to cementing, we will unload the hole with nitrogen. The top of cement is design to overlap into the 7" x 4-1/2" annulus between 200-500'.

<u>Lead:</u> 290 sx of Class "H" Premium Lite High Strength (65/35/6), ¼ pps celloflake, 2% KCl, 0.5% fluidloss, 0.2% dispersant & 2% Phenoseal mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

<u>Tail:</u> 100 sx of Type III cement, 5% BA-10, ¼ pps celloflake, 0.4% fluidloss, 0.3% dispersant & 2% Phenoseal mixed at 14.2 ppg, 1.54 ft<sup>3</sup>/sk, 7.50 gal wtr/sx.

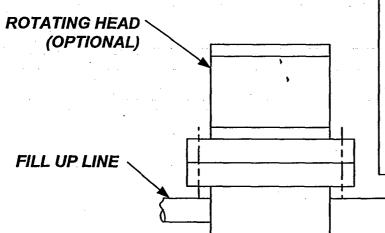
Total estimated slurry volume for the 4-1/2" production casing is 737 ft<sup>3</sup> for  $\pm 5,200'$  of fill. Est. TOC should be @  $\pm 1,750'$ . 40% (excess) over gage hole volume has been added to the number of sacks indicated..

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined for the caliper logs plus 40%.



**VALVE** 

# **BOP** SCHEMATIC 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.

