. Form 3160-3 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR

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

BUREAU OF LANL	MANAGEMENI	
APPLICATION FOR PERMI	T TO DDILL OD DEENTED	5. Lease Serial No.
AFFLICATION FOR FERMI	NMSF - 0079757A	
a. Type of Work	REENTER	6. If Indian, Allotee or Tribe Name
b. Type of Well Oil Well 🔀 Gas Well	Other X Single Zone Multiple Zone	7. Unit or CA Agreement Name and No.
Name of Operator		
XTO Energy Inc.	S 20 40	Vaqueros Canyon #1
a. Address	3b. Phone No. (include area code)	9. API Well No.
2700 Farmington Ave., Bldg. K. Ste 1		3003927679
At surface 1 2701 FMT x 6651 FMT in good		10. Field and Pool, or Exploratory Basin Fruitland Coal
Atsurface 1,370' FNL x 665' FEL in sec	10, 129N, RU4W	11. Sec., T., R., M., or Blk. and Survey or A
At proposed prod. zone		H Sec 4, T29N, R04W
4. Distance in miles and direction from nearest town or post o	ffice*	12. County or Parish 13. State
,	.comfield, NM Post Office	Rio Arriba NM
5. Distance from proposed*		Spacing Unit dedicated to this well
location to nearest	1	
property or lease line, ft. (Also to nearest drg. unit line, if any)	2,238.02	320 E/2
Distance from proposed location*	19. Proposed Depth 20	BLM/BIA Bond No. on file
to nearest well, drilling, completed, applied for, on this lease, ft.		
3,000 ·	4,000'	
l. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will start*	23. Estimated duration
6,949' ungraded ground	Summer 2005	1 week
	24. Attachments	
he following, completed in accordance with the requirements	s of Onshore Oil and Gas Order No. 1, shall be attached to	this form:
 Well plat certified by a registered surveyor. A Drilling Plan A Surface Use Plan (if the location is on National Forest S SUPO shall be filed with the appropriate Forest Service O 	Item 20 above). System Lands, the Item 20 above). Operator certification.	unless covered by an existing bond on file (see
5.Signuature	Name (Printed/Typed)	Date
(W) Patter	Jeffrey W. Patton	3/26/04
itle		
Drilling Engineer	12/ (D) 1/7 D	
approved by (Signautre)	Name (Printed/Typed)	Date
/ m byoto		6/13/00
itle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Office	
application approval does not warrant or certify that the app	plicant holds legal or equitable title to those rights in the	subject loss which would neith the applicant to
onduct operations thereon.	oneant holds legal of equitable title to those rights in the	subject lease which would entitle the applicant t
conditions of approval, if any, are attached.		
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 121	2	
tates any false, fictitious or fraudulent statements or represen	tations as to any matter within its jurisdiction.	to make to any department or agency of the Unit
(Instructions on Reverse)		3314131017
DRILLING OPERATIONS ACTIONATED AND		JUN 2006 😤
DRILLING OPERATIONS AGRICUATE ATTACHED SUBJECT TO COMPLIANCE WITH ATTACHED SUBJECT TO COMPLIANCE WITH ATTACHED		
*CONTRAL **CHIREMENTS"		THO CALL DIV
		DIST, 3
		Francis (10)
nis action in suppose to rectimical and moderate review pursuant to 43 OFR 3 (65.3)		
and appeal pursuant to 43 CFR 3165.4	_	Committee The Committee of the Committee
	NIPRO	ST.

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

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

State of New Mexico nergy, Minerals & Natural Resources Depart

Form C-102

gy, Minerals & Natural Resources Depar. I Revised February 21, 1994 instructions on back

RECD / SAN JUAN State Lease - 4 Copies

OIL CONSERVATION DIVISION

Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office

SAN JUAN State Lease - 4 Copies
Fee Lease - 3 Copies

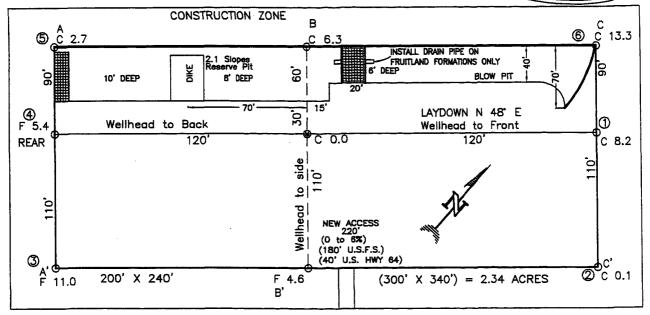
DISTRICT III 1000 Rio Brazos R DISTRICT IV	ld., Aziec, i	I.M. 87410		Se	P.O.	Box 2 NM 87	088 504–2088		DEC	0 5 20	01 _		DED REPORT
PO Box 2088, San	ta Fe, NM E		'EII 1	OCATIO	N AND	. AC	PEAGE	חבטו	CATI	ON PI	∟ ۸۲	AMEN	DED REFORM
1 ADI	Number	VV		Pool Code	N AND	ACI	TEAGE	וטשט		Pool Name			
3000		71079		7/62	9			P) FRUIT		COPL	_
Property Co	de	<u> </u>				perty Na	me		71077	<u> </u>			il Number
3575	13 1				VAQUE	ROS C	ANYON				İ		1
OGRID No.	1				^a Ope	erator Na	me					٠	Elevation
1670	67				XTO É	NERGY	INC					69	949'
					10 Surf	face	Locatio	n					
UL or lot no.	Section 10	Township 29-N	Range 4—W	Lot Idn	Feet from 1370	the	North/South NORTH	line	Feet for 665	rom the	East/West EAST	t line	County RIO ARRIBA
			11 Bott	om Hole	Locat	ion l	f Differ	ent F	rom	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Fest from	the	North/Sout	h line	Feet 1	rom the	East/Wes	st line	County
12 Dedicated Acres	F	13 Jo	int or infil	<u>'</u>	¹⁴ Consolida	otton Coo	ie		15 Orde	r No.	<u> </u>		
320	/	\mathbb{Z}											
NO ALLOY	VABLE V			D TO TH								BEEN C	ONSOLIDATED
CALC'D CORNER				(BOB)			LI ALL		Pa:20	1112 31	7101011		
		LAT: 36°44' LONG: 107'		852 NM GLO 8.04" (78.94 WEST	CH)		1376'			hereby certify	that the info	ormation conf	RTIFICATION tained herein is owledge and belief
				10 —			854'	1、 :	O CH)	Signature Printed Nat	ne DRILLI	Date No ENG	INELER
LOCATION IS WELLS AND N.M. OIL & SECTION AN EXISTANT IN OF THE TOV EXACT DIME	DRY HO GAS CO D QUART THE AR WNSHIP I	ILES ON REINSERVATION TER CORNE REA. DEPEN S REQUIRE	ECORD NO COMMINICATE OF AREA DENT RED TO O	WITH IISSION. NON- ESURVEY BTAIN					•	hereby certificate plotted from under my correct to the	bear and	well location as of actual and that we belief. R	TIFICATION shown on this plat surveys made by me se same is true and
			-							Signature to	STEE	35/BMAL	

Certificate Number

CALC'D CORNER

XTO ENERGY INC. VAQUEROS CANYON No. 1, 1370 FNL 665 FEL SECTION 10, T29N, R4W, N.M.P.M., RIO ARRIBA COUNTY, N. M. DATE: NOVEMBER 28, 2001 **GROUND ELEVATION: 6949,**

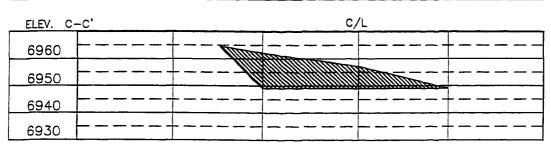
 $= 36^{\circ}44'35'' \text{ N}$ LONG. = 107-14'04"



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE). BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION. C/ ELEV. A 6960 6950 6940 6930 C/L ELEV. B-B 6960 6950



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

DRAWN BY: A.G.

6940

6930

ROW#: CR092

CADFILE: CRO92CF8

DATE: 12/3/01

Surveying and Oil Fleid Services
O. Box 15088 Farmington, NM 87401
e (505) 326-1772 Fax (505) 326-6019

P. 0 Phone

Daggett Enterprises, Inc.

回

XTO ENERGY INC.

Vaqueros Canyon #1 APD Data March 26, 2004

Location: Surface: 1,370' FNL & 665' FEL, Sec 10, T29N, R04W County: Rio Arriba State: New Mexico

PROJECTED TOTAL DEPTH: ±4,000' (MD)

GR ELEV: 6,949'

OBJECTIVE: Fruitland Coal
Est KB ELEV: 6,961' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 3,500'	3,500' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND
WEIGHT	8.6-9.0	8.4-8.8	8.6-9.0
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. Pre-treat with 20% LCM @ 3,500°. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity (>85 sec) at TD for logging. Reduce viscosity after logging for cementing purposes.

2. CASING PROGRAM:

Surface Casing:

8-5/8" casing to be set at \pm 360' in 8.8 ppg mud

							110			_		
					Coll	Burst						
					Rating	Rating	Jt Str	${ m ID}$	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-360'	360'	24#	J-55	STC	1370	2950	244	8.097	7.972	7.32	7.95	29.39

Production Casing: 4-1/2" casing to be set at TD in 9.0 ppg mud.

					Coll	Burst						
					Rating	Rating	Jt Str	${ m I\!D}$	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-TD	4,000'	10.5#	J-55	STC	4010	4790	132	4.052	3.875	1.66	1.33	2.44

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), 4-1/2" 8rnd female thread on bottom, 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:

8-5/8", 24#, J-55, STC casing to be set at \pm 360'.

<u>Lead:</u> 210 sx of Type III or equivalent cement containing accelerator and LCM typically mixed at 14.6 ppg, 1.41 ft³/sk, & 6.30 gal wtr/sk.

Total slurry volume is 296 ft^3 , $\pm 100\%$ excess of calculated annular volume to 360'.

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at $\pm 4,000$ '.

<u>Lead:</u> 350 sx of Type III w/3% extender, 1/4#/sx celloflake & 2% Phenoseal (LCM) mixed at 11.4 ppg, 2.89 cuft/sx & 17.4 gals/sx water.

Tail: 150 sx Premium Lite HS (65%/35%/6%) w/2% KCl, 1/4#/sx cello, 0.35% dispersant, 0.25% fluidloss additive & 5 #/sx gilsonite mixed @ 12.5 ppg, 2.01 cuft/sx & 10.7 gals/sx water.

Total estimated slurry volume (including 40% excess) for the 4-1/2" production casing is 1,311 ft³.

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

5. LOGGING PROGRAM:

A. Open Hole Logs as follows: Run Dual Induction/SFL/GR/SP fr/TD (±4,000') to the bottom of the surface csg. Run CNL/LDT (Lithodensity)/GR/Cal and Pe from TD to the bottom of the surface casing.

6. FORMATION TOPS:

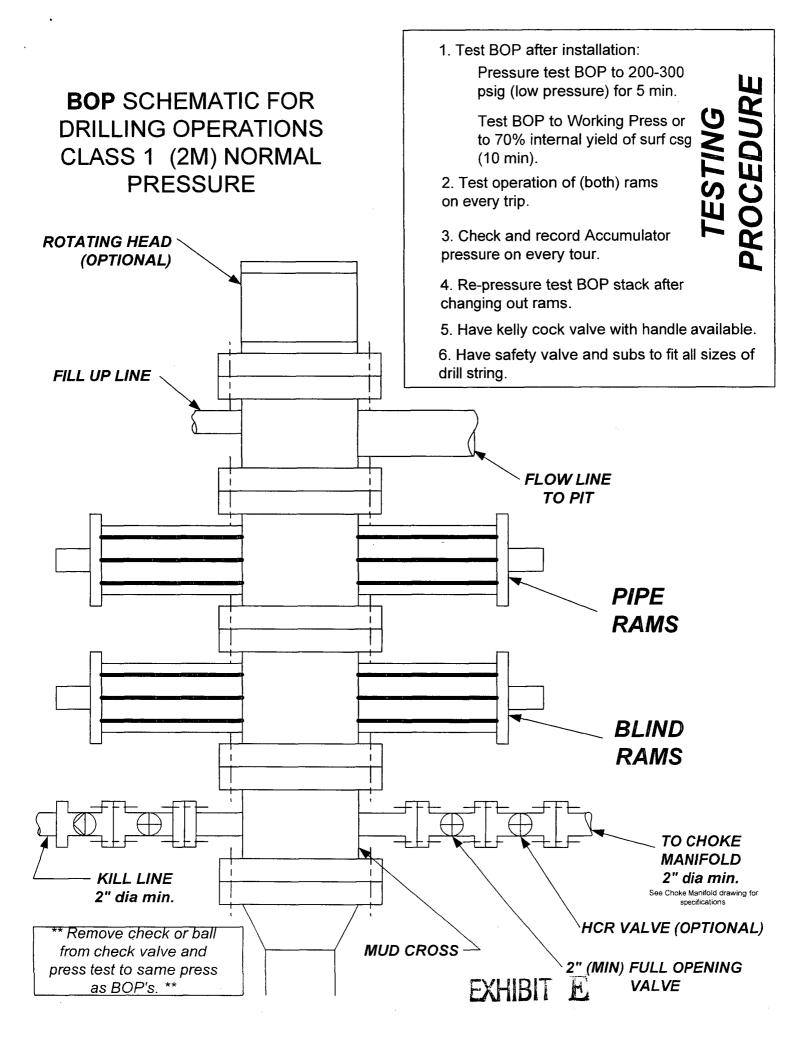
Formation	Subsea Depth	Well Depth (MD)		
Ojo Alamo SS	+3968'	2993'		
Kirtland Shale				
Farmington SS				
Fruitland Formation	+3750	3211'		
Lower Fruitland Coal				
Pictured Cliffs SS	+3350'	3611'		
Lewis Shale	+3100'	3861'		
Projected TD	+2961'	4000'		

^{*} Target Reservoir. Maximum anticipated reservoir pressure will be $\pm 1,000$ psig.

7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Jeff Patton	Drilling Engineer	505-324-1090	505-632-7882
Dennis Elrod	Drilling Foreman	505-486-6460 (cell)	505-326-2024
Reed Meek	Project Geologist	817-885-2191	432-687-0615
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP 3/26/04



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

