Form 3160-3 (April 2004)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRI		1					
AND MARKET AND	ILL OR REENTER	5. Lease So					
. Type of Work REE	6. If Indian	6. If Indian, Allotee or Tribe Name JICARILLA APACHE					
2005	2002 UCI II						
Cut wen X Gas wen C Other	Single Zone Multiple Zon	5	CA Agreement Name and No.				
Name of Operator	OTO FARMINGTON LA		ame and Well No.				
TO Energy Inc. Address	3b. Phone No. (include area co	de) APACE	E FEDERAL #17				
2700 Farmington Ave., Bldg. K. Ste 1 Farmington		30-0	39-29679				
Location of Well (Report location clearly and in accordance with any	v State equirements)*	10. Field an	d Pool, or Exploratory				
At surface 1970' FNL x 1790' FNL			RD PICTURED CLIFFS , R., M., or Bik. and Survey or Are				
At proposed prod. zone			8, T24N, R5W				
Distance in miles and direction from nearest town or post office*		12. County					
Approx 64 miles from Bloomfie	eld, NM Post Office	RIO ARR	•				
Distance from proposed*	16. No. of Acres in lease		ledicated to this well				
location to nearest property or lease line, ft. Approx 1790		161.	•				
(Also to nearest drg. unit line, if any)	2566.31	1.60	ACRES NW/4				
Distance from proposed location*	19. Proposed Depth	20. BLM/BIA B	ond No. on file				
to nearest well, drilling, completed, applied for, on this lease, ft.	2000						
Approx 1265	23001	<u> </u>					
Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will star	rt* 23. Es	imated duration				
6469' GROUND ELEVATION	WINTER 2005		2 WEEKS				
A Surface Use Plan (if the location is on National Forest System Land SUPO shall be filed with the appropriate Forest Service Office).	· •	formation and/or p	lans as may be required by the				
		<del></del>					
$\mathcal{A}$ . $\mathcal{A}$	Name (Printed/Typed)		Date				
Kyla Vaughan	Name (Printed Typed)  Kyla Vaughan		Date 10/10/05				
Kyla Wughen	1						
tle Regulatory Compliance Tech	1		<b>1</b>				
Regulatory Compliance Tech  pproved by (Signautre)  Mankiew	Kyla Vanghan		10/10/05				
pplication approval does not warrant or certify that the applicant holds and the product operations thereon.	Name (Printed/Typed)  Office	the subject lease w	10/10/05    Date				
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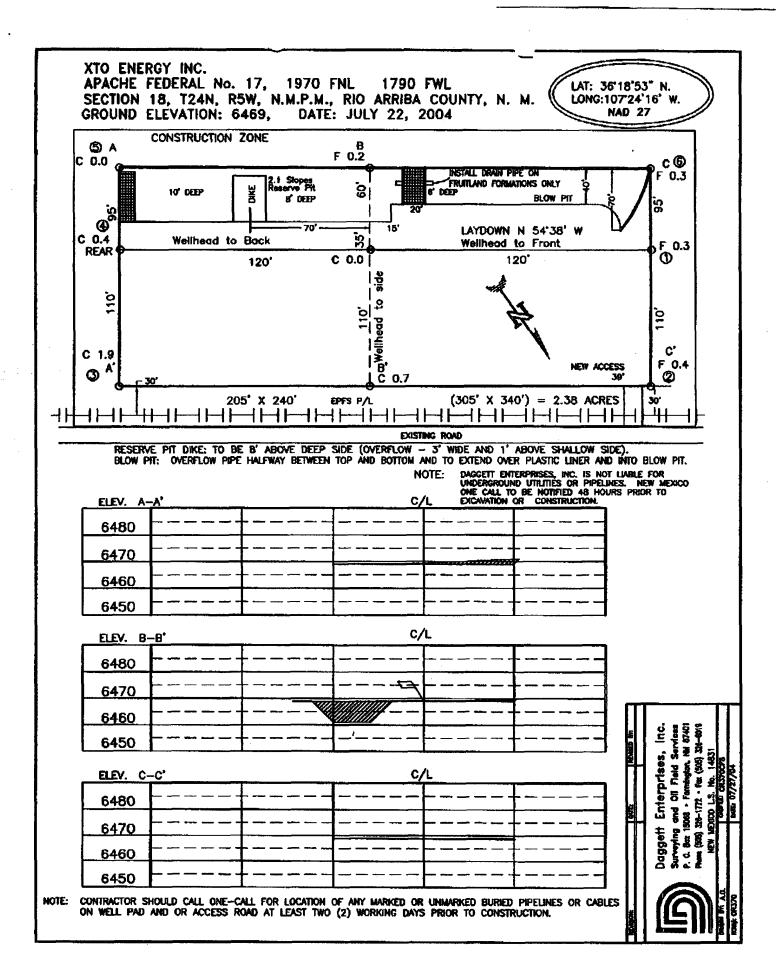
This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

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

OPSTRECT ( 1625 N. Fanch Dr., Hobbs, N.M.	88240	Ene		itate of New als & Natural R	lecources Departme		Revise	Form C-102 d June 10, 2003
DISTRICT # 1301 M. Grand Avenue, Artesia. DISTRICT M	H.M. 68210	-	OIL C	ONSERVATIO			t to Approprio	ructions on back te District Office ease — 4 Copies
1000 Rio Brosos Rd., Aztec, NJ	W. 87410		1	220 South St. anta Fe. NM 8	Fermala De	RECEIV O FARMILL		euse — 3 Copies
DISTRICT IV 1220 South St. Francis Dr., Son	ola Fa, NN 87	505	.31	Jijito Fe, 14m O	/3042000 U }	U Para Street	☐ AME	NDED REPORT
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*Property Code				*Property H APACHE FEE			•1	Well Humber
3311U		~	<del></del>	Operator 1				* Elevation
167067	·····			XTO ENERG	Y INC.			6469
		<del></del>	<del></del>	10 Surface				
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125.4" NORTH WITNESS COR.			l	ĺ		4	IRVEYOR CER	
FD 3 1/4" BC 1964 BLM						was platted fo	ly that the well logalis on field notes of actual repervision, and that t	d surveys made by me
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LOT 4							8 5-04	WH 33
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Description	Submit 3 Copies To Appropriate District Office Energy, Minerals and Natural Resources	Form C-103 May 27, 2004
SUNDRY NOTICES AND REPORTS ON WELLS   7. Lease Name of Unit Agreement Name: APROESSALS;   1. Type of Well   Gas Well   2   Other   9. OGRID Number   167067   10. Pool name of Widden   10. Pool name of Wi	District II  1625 N. French Dr., Hobbs, NM 87240 District III  1301 W. Grand Ave., Artesia, NM 88210 District III  1000 Rio Brazos Rd., Aztec, NM 87410 District IV  OIL CONSERVATION DIVISION  1220 South St. Francis Dr.  Santa Fe, NM 87505	WELL API NO.  30-039-20679  5. Indicate Type of Lease  STATE FEE   6. State Oil & Gas Lease No.
1. Type of Well:   Gas Well   G	(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH	7. Lease Name or Unit Agreement Name:
2. Name of Operator  2. Name of Operator  2. Name of Operator  3. Address of Operator  3. Address of Operator  3. Address of Operator  4. Well Location  Unit Letter  5. 1970  10. Pool name or Widdet  11. Elevation (Show whether DR. RKB, RT., GR. etc.)  11. Elevation (Show whether DR. RKB, RT., GR. etc.)  12. It is recommended that Application R. or Cheure    13. Despite pupils to Groundwater  14. Well Location  15. Township 248 Range 58 NMPM NMPM County RTO ANNERS.  16. Elevation (Show whether DR. RKB, RT., GR. etc.)  16. Elevation (Show whether DR. RKB, RT., GR. etc.)  17. Elevation (Show whether DR. RKB, RT., GR. etc.)  18. Township 248 Range 58 NMPM NMPM County RTO ANNERS.  19. Despite pupils to Groundwater  10. Check Application R. or Cheure    11. Elevation (Show whether DR. RKB, RT., GR. etc.)  12. It is Below-Grade Tank: Volume bldg Construction Material  12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data  NOTICE OF INTENTION TO:  SUBSEQUENT REPORT OF:  PERFORM REMEDIAL WORK   ALTERING CASING    COMMENCE DRILLING OPNS   PLUG AND ABANDON    THEMPORARILY ABANDON   CHANGE PLANS    COMMENCE DRILLING OPNS   PLUG AND ABANDON    COMMENCE DRILLING	1. Type of Well:	
167067   10. Pool name or Wildcat   10. Pool n		
3. Address of Operator 2700 Parministron Ave., Bldr. K. Ste 1 Farministon, NM 87401  4. Well Location  Unit Letter F 1970 feet from the NORTH line and 1790 feet from the WEST line Section 1B Township 24N Range 5N NMPM NAMM County RIO APRIDA Follows whether PR. R.K.B. RT. GR. etc.)  11. Elevation (Show whether PR. R.K.B. RT. GR. etc.)  28 type 18 RLIL. Depth to Groundwater 1900. Distance from nearest fresh water well 1000 Distance from nearest surface water 40000 ADDRESS TRUE IN TRICKING TO THE TRICKING SITE AND COMMENCE OF INTENTION TO:  29 PER Liner Thickness: 12 mll Below-Grade Tank: Volume bldc Construction Material  12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO:  20 SUBSEQUENT REPORT OF:  20 PERFORM REMEDIAL WORK PLUG AND ABANDON ABANDON ABANDON ABANDON ABANDONMENT COMMENCE ORILLING OPNS. ABANDONMENT COMMENT ABANDON ABANDONMENT COMMENT OF THE POPUL OR ALTER CASING MULTIPLE COMPLETION CHERT JOB  21 Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RUILE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.  220 Bracky proposed to inestall a pat on location for drilling. The pat will be closed in accordance with NMOOD guidelines when work is completed.  23 Interest Completion Described acciding to NMOOD guidelines [2] . a general permit or an (attached) alternative OCD-approved plan SIGNATURE  24 TITLE Regulatory Carpliance Bach DATE 10/10/05  25 E-mail address: kyla vangham Telephone No. 505-564-6726	<b>*</b>	ł
Well Location   Unit Letter		10. Pool name or Wildcat
Unit Letter F : 1970 feet from the NORTH line and 1790 feet from the NEST line Section 18 Township 240 Range 5W NMPM NAME County RTO APREBA  11. Elevation (Show whether DR, RKB, RT, GR, etc.)  6469*  Pit Liner Thickness: 12 mil Below-Grade Tank. Application \$\overline{\text{DE}}\$ of County Pit Liner Thickness: 12 mil Below-Grade Tank: Volume blue, Construction Material  12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: REMEDIAL WORK ALTERING CASING TEMPORARILY ABANDON CHANGE PLANS COMMENCE DRILLING OPNS. ALTERING CASING TEMPORARILY ABANDON CHANGE PLANS OTHER: OTHER: OTHER: DISTAND CHANGE PLANS OTHER DISTAND PLANS OTHER DISTAND CHANGE PLANS OTHER DISTAND PL		BALLARD PICTURED CLIFFS
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Distance from nearest fresh water well   2000   Distance from nearest surface water   2000		
Pit Liner Thickness: 12 mit   Below-Grade Tank: Volume   bhis, Construction Material		stance from nearest surface water \$1000 >200
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NOTICE OF INTENTION TO:  PERFORM REMEDIAL WORK  PLUG AND ABANDON  ALTERING CASING  ALTERING CASING  ALTERING CASING  ALTERING CASING  ALTERING CASING  ABANDONMENT  COMMENCE DRILLING OPNS.  PLUG AND ABANDONMENT  CASING TEST AND  CEMENT JOB  ABANDONMENT  CASING TEST AND  CEMENT JOB  ABANDONMENT  COMPLETION  OTHER:  13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.  **XTO Energy proposed to install a pit on location for drilling. The pit will be closed in accordance with NMCCD guidelines when work is completed.  Thereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines  in a general permit or an (attached) alternative OCD-approved plan  SIGNATURE  TITLE Regulatory Compliance Tech DATE 10/10/05  E-mail address: kyla vaugham@xtoenergy.com  Type or print name Ryla Vaugham  **TOS State Use Only**  **DEPUTY OLA 4 GAS INSPECTOR, DST. ***  JAN 1 2 2006		
PULL OR ALTER CASING	NOTICE OF INTENTION TO: SUB	SEQUENT REPORT OF:
PULL OR ALTER CASING  MULTIPLE  CASING TEST AND  CEMENT JOB  OTHER: PIT  OTHER:  OTHER:	TEMPORARILY ABANDON CHANGE PLANS COMMENCE DRILLI	
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Type or print name Kyla Vanghan  Telephone No. 505-564-6726  For State Use Only  JAN 1 2 2006	THE	
APPROVED BY JAN 1 2 2006	Type or print name Kyla Vanghan	Telephone No. 505-564-6726
APPROVED BYDATE	For State Use Only	CTOR DIST AND LANE 1 9 2000
Conditions of Approval if any		JAN TY COM



#### XTO ENERGY INC.

#### Apache Federal #17 APD Data October 4, 2005

Location: 1970' FNL x 1790' FWL Sec 18, T24N, R5W County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 2300'

OBJECTIVE: Pictured Cliffs

APPROX GR ELEV: 6469'

Est KB ELEV: <u>6481' (12' AGL)</u>

#### 1. MUD PROGRAM:

INTERVAL	0' to 225'	225' to 2300'
HOLE SIZE	12.25"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer
WEIGHT	8.6-9.0	8.4-8.8
VISCOSITY	28-32	28-32
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. 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  $\pm$  225' 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
										12.73		
0'-225'	225'	24.0#	J-55	ST&C_	1370	2950	244	8.097	7.972	0	27.41	45.19

Production Casing: 5.5" casing to be set at TD (±2300') in 7-7/8" hole filled with 9.20 ppg mud.

			<u> </u>		<u> </u>								
ļ						Coll	Burst						
1						Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
ı	Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
	0'-2300	2300'	15.5#	J-55	LT&C	4040	4810	217	4.950	4.825	3.67	4.37	6.09

#### 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  $\pm$  225' in 12-1/4" hole.

134 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 186 ft<sup>3</sup>, 100% excess of calculated annular volume to 225'.

B. Production:

5.5", 15.5#, J-55 (or K-55), LT&C casing to be set at  $\pm 2300$ ' in 7.875" hole.

#### LEAD:

±163 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.

Total estimated slurry volume for the 5-1/2" production casing is 558 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 (2300') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (2300') to 3,000'.

#### **FORMATION TOPS:**

Est. KB Elevation: 6481'

FORMATION	Sub-Sea Elev.	WELL DEPTH	FORMATION	Sub-Sea Elev.	WELL DEPTH
Ojo Alamo SS	4911	1,570	Gallup Ss		
Kirtland Shale	4775	1,706	Greenhorn Ls		
Farmington SS			Graneros Sh		
Fruitland Formation	4678	1,803	1 <sup>ST</sup> Dakota Ss		
Lower Fruitland Coal			2 <sup>ND</sup> Dakota Ss		
Pictured Cliffs SS*	4356	2,125	3 <sup>RD</sup> Dakota Ss		
Lewis Shale	4240	2,241	4 <sup>TH</sup> Dakota Ss		
Chacra SS			5 <sup>TH</sup> Dakota Ss		
Cliffhouse SS			6 <sup>TH</sup> Dakota Ss		
Menefee			Burro Canyon Ss		
Point Lookout SS			Morrison Fm		
Mancos Shale			Total Depth	4181	2,300

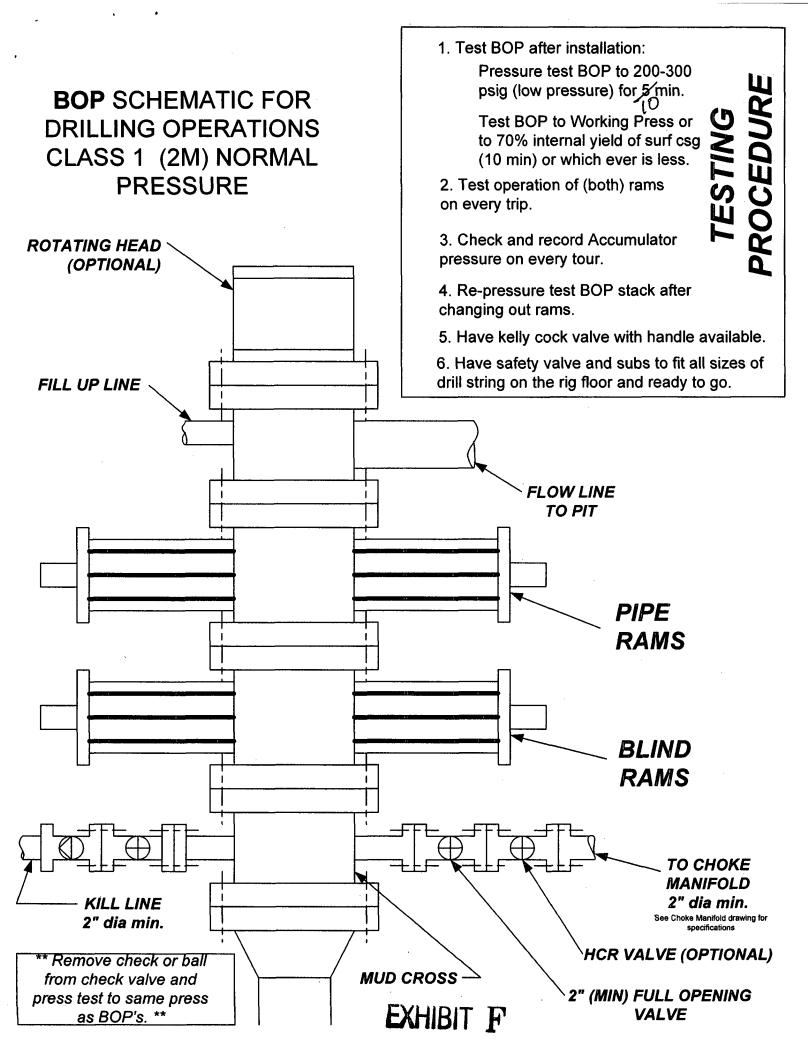
#### 7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Jeff Patton	Drilling Engineer	505-324-1090	505-632-7882
John Egelston	Drilling Engineer	505-564-6734	505-330-6902
Dennis Elrod	Drilling foreman	505-486-6460	505-326-2024
Red Meek	Project Geologist	817-885-2800	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP 10/4/05

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

\*\*\*\* 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

