

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>SF-081239</b>
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>N/A</b>
2. Name of Operator <b>XTO Energy Inc.</b>		7. Unit or CA Agreement Name and No. <b>N/A</b>
3a. Address <b>2700 Farmington Ave., Bldg. K, Ste 1 Farmington, NM</b>	3b. Phone No. (include area code) <b>505-324-1090</b>	8. Lease Name and Well No. <b>IC Kelly #1F</b>
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface <b>2340' ENL x 675' FWL in Sec 5, T30N, R12W</b> At proposed prod. zone <b>SAME</b>		9. API Well No. <b>30-045-33463</b>
14. Distance in miles and direction from nearest town or post office* <b>Approx 4 miles North of Flora Vista, NM post office</b>		10. Field and Pool, or Exploratory <b>Basin Dakota</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) <b>675'</b>	16. No. of Acres in lease <b>2410.24</b>	11. Sec., T., R., M., or Blk. and Survey or Area <b>(E) Sec 5, T30N, R12W</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>900'</b>	19. Proposed Depth <b>7176'</b>	12. County or Parish <b>San Juan</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6004' Ground Elevation</b>	22. Approximate date work will start* <b>winter 2005</b>	13. State <b>NM</b>
20. BLM/BIA Bond No. on file <b>UTB-000138</b>		17. Spacing Unit dedicated to this well <b>286.92 w/2</b>
23. Estimated duration <b>2 weeks</b>		

24. Attachments

The following, completed in accordance with the requirements 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 System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Kyla Vaughan</i>	Name (Printed/Typed) <b>Kyla Vaughan</b>	Date <b>11/22/05</b>
Title <b>Regulatory Compliance Tech</b>		
Approved by (Signature) <i>Wayne Townsend</i>	Name (Printed/Typed) <b>Wayne Townsend</b>	Date <b>1/9/07</b>
Title <i>Acting AFM</i>	Office <b>FFO</b>	

Application approval does not warrant or certify that the applicant 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, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

APD/ROW

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".

NMOCD

1/10/07

OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SECTION COR.  
 FD 3 1/4" BC  
 1881 BLM

S 49-40-37 E  
 2355.8' (M)

QUARTER COR.  
 FD 3 1/4" BC  
 1951 BLM

N 88-51-01 E  
 2623.2' (M)

LOT 8      LOT 7      LOT 6      LOT 5

LOT 9      LOT 10      LOT 11      LOT 12

LAT: 36°50'31.9" N. (NAD 27)  
 LONG: 108°07'35.8" W. (NAD 27)

QUARTER COR.  
 FD 3 1/4" BC  
 1976 BLM

LOT 16      LOT 15      LOT 14      LOT 13

LOT 17      LOT 18      LOT 19      LOT 20

17. OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Debra K. Small  
 Signature  
Debra K. Small  
 Printed Name  
Regulatory Compliance Tech  
 Title  
4/22/05  
 Date

18. SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MARCH 2, 2005  
 Date of Survey  
 [Signature]  
 Title  
 [Stamp: JAMES W. VANDERKAM, NEW MEXICO, 14631, REGISTERED PROFESSIONAL SURVEYOR]  
 14631

Submit 3 Copies To Appropriate District Office

**District I**

1625 N. French Dr., Hobbs, NM 87240

**District II**

1301 W. Grand Ave., Artesia, NM 88210

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

**OIL CONSERVATION DIVISION**

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-103

May 27, 2004

WELL API NO. <u>30-045-33463</u>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. <u>SF-081239</u>
7. Lease Name or Unit Agreement Name: <u>LC Kelly</u>
8. Well Number <u>#1F</u>
9. OGRID Number <u>167067</u>
10. Pool name or Wildcat <u>Basin Dakota</u>

**SUNDRY NOTICES AND REPORTS ON WELLS**

(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 PROPOSALS.)

1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>	2. Name of Operator <u>XTO Energy Inc.</u>
3. Address of Operator <u>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401</u>	4. Well Location Unit Letter <u>E</u> : <u>2340</u> feet from the <u>North</u> line and <u>675</u> feet from the <u>West</u> line Section <u>5</u> Township <u>30N</u> Range <u>12W</u> NMPM <u>NMEM</u> County <u>SAN JUAN</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>6004' Ground Elevation</u>	
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type <u>DRILL</u> Depth to Groundwater <u>&gt;100</u> Distance from nearest fresh water well <u>&gt;1000</u> Distance from nearest surface water <u>&gt;200</u>	
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>8000</u> bbls; Construction Material _____	

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

**NOTICE OF INTENTION TO:**

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: PTT

**SUBSEQUENT REPORT OF:**

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐

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 intends to install a pit on location for drilling.

I hereby 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 NMOC guidelines ☒ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Kyla Vaughan TITLE Regulatory Compliance Tech DATE 11/22/05

Type or print name Kyla Vaughan

E-mail address: kyla\_vanhan@xtoenergy.com

Telephone No. 505-564-6726

For State Use Only

APPROVED BY [Signature]

DEPUTY OIL & GAS INSPECTOR, DIST. 4

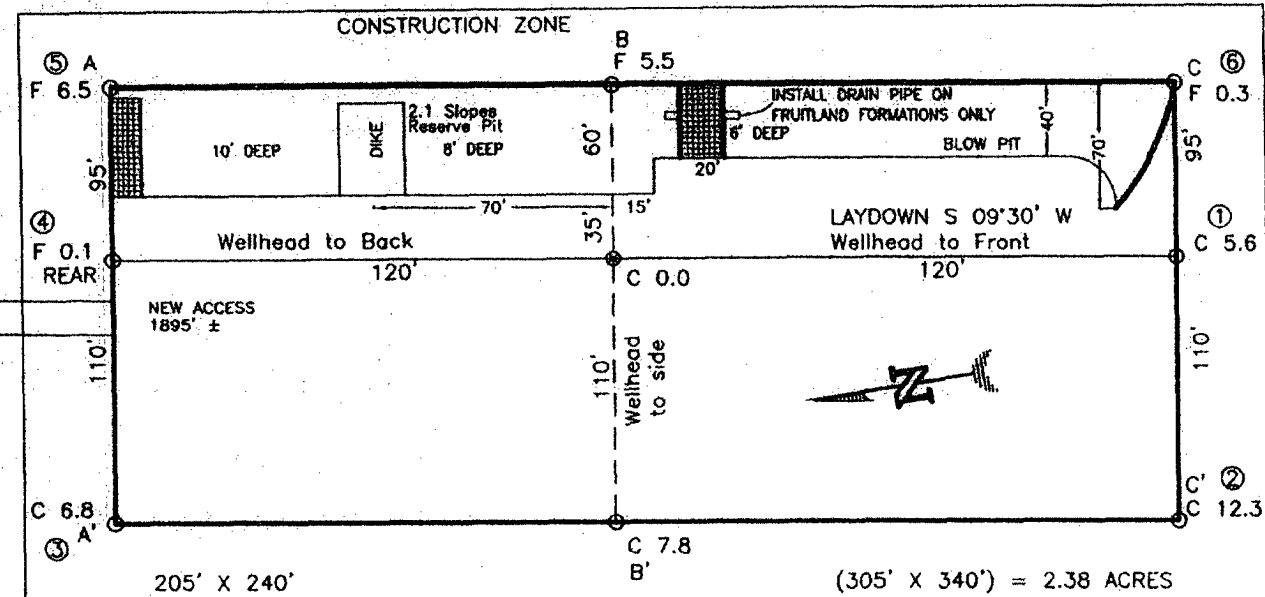
TITLE \_\_\_\_\_ DATE JAN 09 2007

Conditions of Approval, if any:

**EXHIBIT D**

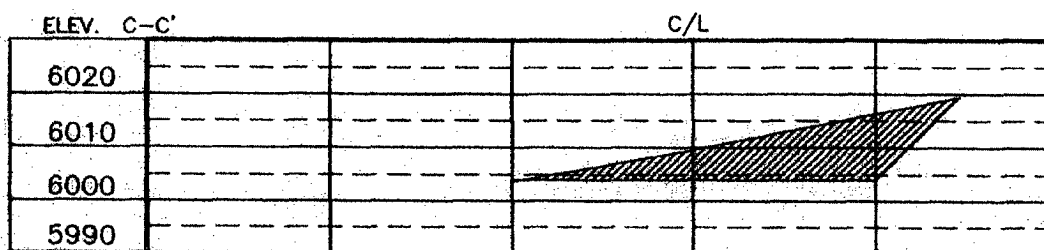
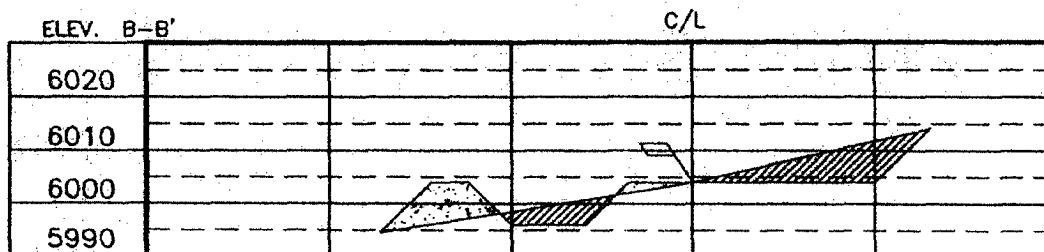
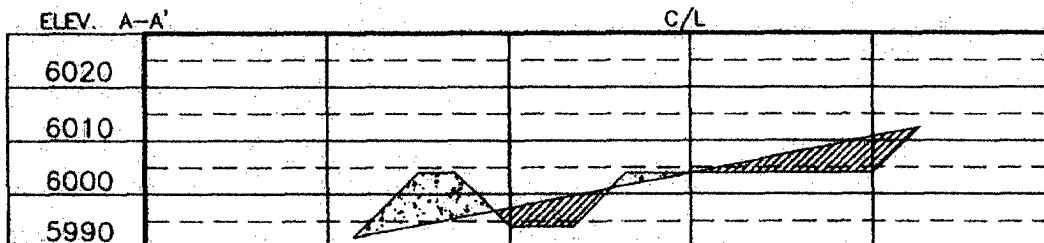
XTO ENERGY INC.  
 L.C. KELLY No. 1F, 2340' FNL 675' FWL  
 SECTION 5, T30N, R12W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 6004', DATE: MARCH 2, 2005

LAT. = 36°50'31.9" N.  
 LONG. = 108°07'35.8" W  
 NAD 27



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.



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.

REVISION	DATE	BY	DATE	BY
1	11/01/05	AG	11/01/05	AG

**Daggett Enterprises, Inc.**  
 Surveying and Oil Field Services  
 P. O. Box 19068 • Farmington, NM 87401  
 Phone (505) 326-1772 • Fax (505) 326-8019  
 NEW MEXICO P.L.S. No. 14831  
 GSP#00103447070  
 DATE: 04/27/05

EXHIBIT E

# XTO ENERGY INC.

LC Kelly #1F

APD Data

November 22, 2005

Location: 2340' FNL x 675' FWL Sec 5, T30N, R12W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 7176'

OBJECTIVE: Basin Dakota

APPROX GR ELEV: 6004'

Est KB ELEV: 6016' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 7176
HOLE SIZE	12.25"	7.875"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6- 9.20
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. 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  $\pm 360'$  in a 12-1/4" hole filled with 9.20 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'-360'	360'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	7.950	17.13	28.24

Production Casing: 5.5" casing to be set at TD ( $\pm 7176'$ ) in 7-7/8" hole filled with 9.20 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'-7176	7176'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.18	1.40	1.82

## 3. WELLHEAD:

- 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.
- 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.

EXHIBIT F

**4. CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):**

A. Surface: 8.625", 24.0#, J-55, ST&C casing to be set at  $\pm 360'$  in 12-1/4" hole.

214 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/sx.

*Total slurry volume is 297 ft<sup>3</sup>, 100% excess of calculated annular volume to 360'.*

B. Production: 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at  $\pm 7176'$  in 7.875" hole. DV Tool set @  $\pm 4000'$

1<sup>st</sup> Stage

LEAD:

$\pm 268$  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.

2<sup>nd</sup> Stage

LEAD:

$\pm 331$  sx of Type III with 8% gel, 1/4 pps cello & 2% LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sx.

TAIL:

100 sx Type III neat mixed at 14.5 ppg, 1.39 cuft/sx, 6.3 gal/sx.

*Total estimated slurry volume for the 5-1/2" production casing is 1750 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 (7176') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7176') to 3,000'.

**EXHIBIT F**

## 6. FORMATION TOPS:

Est. KB Elevation: 6016'

FORMATION	Sub-Sea Elev.	WELL DEPTH	FORMATION	Sub-Sea Elev.	WELL DEPTH
Ojo Alamo SS	5300	716	Gallup Ss	152	5,864
Kirtland Shale	5214	802	Greenhorn Ls	-610	6,626
Farmington SS	5090	926	Graneros Sh	-664	6,680
Fruitland Formation	4201	1,815	1 <sup>ST</sup> Dakota Ss*	-733	6,749
Lower Fruitland Coal	4001	2,015	2 <sup>ND</sup> Dakota Ss	N/A	
Pictured Cliffs SS	3801	2,215	3 <sup>RD</sup> Dakota Ss*	-776	6,792
Lewis Shale	3650	2,366	4 <sup>TH</sup> Dakota Ss	N/A	
Chacra SS**	2728	3,288	5 <sup>TH</sup> Dakota Ss**	-822	6,838
Cliffhouse SS	2156	3,860	6 <sup>TH</sup> Dakota Ss**	-856	6,872
Menefee*	2008	4,008	Burro Canyon Ss**	-920	6,936
Point Lookout SS*	1432	4,584	Morrison Fm**	-960	6,976
Mancos Shale	1232	4,784	<b>Total Depth</b>	<b>-1160</b>	<b>7,176</b>

\* Primary Objective

\*\* Secondary Objective

\*\*\*\* Maximum anticipated BHP should be <2,000 psig ( <0.30 psi/ft) \*\*\*\*\*

## 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

11/22/05

**EXHIBIT F**

# BOP SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

## TESTING PROCEDURE

### 1. Test BOP after installation:

Pressure test BOP to 200-300  
psig (low pressure) for ~~5~~<sup>10</sup> min.

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

### 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 on the rig floor and ready to go.

ROTATING HEAD  
(OPTIONAL)

FILL UP LINE

FLOW LINE  
TO PIT

PIPE  
RAMS

BLIND  
RAMS

TO CHOKE  
MANIFOLD  
2" dia min.

See Choke Manifold drawing for  
specifications

HCR VALVE (OPTIONAL)

2" (MIN) FULL OPENING  
VALVE

MUD CROSS

KILL LINE  
2" dia min.

\*\* Remove check or ball  
from check valve and  
press test to same press  
as BOP's. \*\*

EXHIBIT F



# **CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE**

1. Stake all lines from choke manifold to pit.
2. Pressure test choke manifold after installation.
3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

## **TESTING PROCEDURE**

