

Form 3160-3  
(February 2005)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No. **077383**  
NMSF **077383**

6. If Indian, Allottee or Tribe Name  
N/A **RECEIVED**

7. If Unit or CA Agreement, Name and No.  
N/A **NMN-M-73958-DK**

8. Lease Name and Well No.  
**KUTZ FEDERAL #12F**

9. API Well No.  
**30-045-34383**

10. Field and Pool, or Exploratory  
**DK - WC BASIN MC - CH**

11. Sec., T. R. M. or Blk. and Survey or Area  
**(N) SEC 21, T28N, R10W**

12. County or Parish  
**SAN JUAN**

13. State  
**NM**

1a. Type of work: ☒ DRILL ☐ REENTER  
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
**XTO Energy, Inc.**

3a. Address **2700 Farmington Ave, Bldg K - Suite 1  
Farmington NM 87402**

3b. Phone No. (include area code)  
**505-324-1090**

4. Location of Well (Report location clearly and in accordance with any State requirements.)  
At surface **1220' FSL x 2525' FWL**  
At proposed prod. zone **same**

14. Distance in miles and direction from nearest town or post office\*  
**Approximately 6.5 miles Southeast of Bloomfield, NM post office**

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drg. unit line, if any) **1220'**

16. No. of acres in lease  
**1280**

17. Spacing Unit dedicated to this well  
**W/2 320 DK, SW/4 160 MC, SW/4 160 CH**

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft. **855'**

19. Proposed Depth  
**7070' 7000'**

20. BLM/BIA Bond No. on file  
**UTB-000138**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**6047' GROUND ELEVATION**

22. Approximate date work will start\*  
**09/15/2007**

23. Estimated duration  
**2 weeks**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature **Kyla Vaughan**  
Title **Regulatory Compliance**

Name (Printed/Typed)  
**Kyla Vaughan**

Date  
**08/03/2007**

Approved by (Signature) **[Signature]**  
Title **AFM**

Name (Printed/Typed)  
**FEO**

Date  
**8/16/07**

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)

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

HOLD OCT 104 FOR NSL

APD/ROW

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

NMOCD

8/10/26

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

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

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 30 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30.045-34383		Pool Code 82329	Pool Name OTERO CHACRA
Property Code	Property Name KUTZ FEDERAL		Well Number 12F
CORD No. 5380	Operator Name XTO ENERGY INC.		Elevation 6047

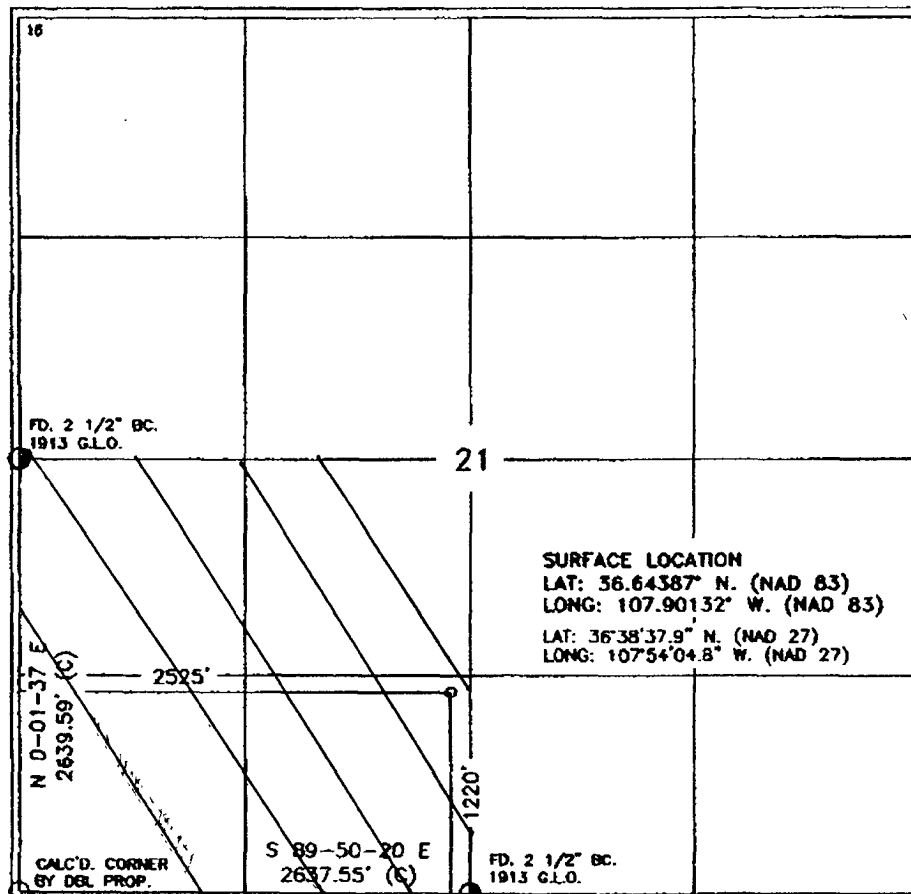
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	28-N	10-W		1220	SOUTH	2525	WEST	SAN JUAN

11 Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres SW/4 160		Joint or Infill		Consolidation Code		Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Kyla Vaughan 8/2/07  
Signature Date  
Kyla Vaughan  
Printed Name

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.

DECEMBER 27, 2006

Date of Plat  
ROY A. RUSH  
NEW MEXICO  
REGISTERED  
68894  
PROFESSIONAL LAND SURVEYOR

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30045-34383	<sup>2</sup> Pool Code 97232	<sup>3</sup> Pool Name WC BASIN MANCOS
<sup>4</sup> Property Code	<sup>5</sup> Property Name KUTZ FEDERAL	<sup>6</sup> Well Number 12F
<sup>7</sup> OCRD No. 5380	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 6047

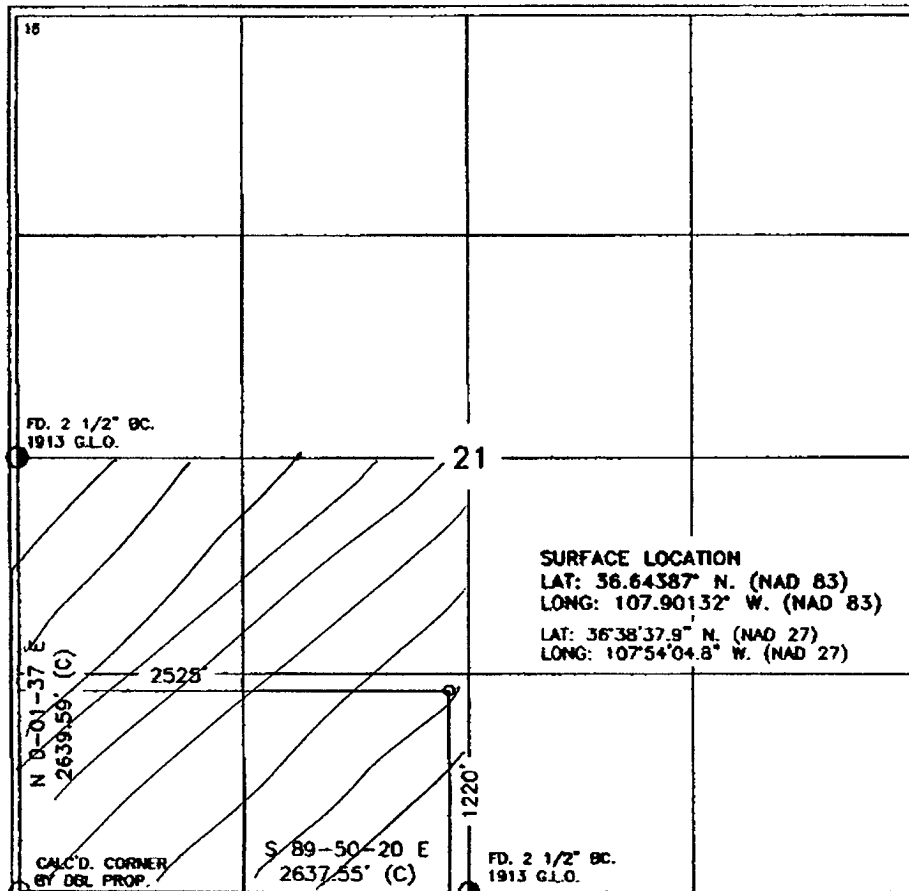
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	28-N	10-W		1220	SOUTH	2525	WEST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
SW 1/4	160								
<sup>12</sup> Dedicated Acres		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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*Kyla Vaughan* 8/2/07  
Signature Date  
Kyla Vaughan  
Printed Name

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.

DECEMBER 27, 2006  
Date of Survey

*JOY A. RUSH*  
Professional Land Surveyor  
889

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

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

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised October 12, 2005

Submit to: Appropriate District Office

State Lease - 4 Copies

Fed Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30045:34383	<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name BASIN DAKOTA
<sup>4</sup> Property Code	<sup>5</sup> Property Name KUTZ FEDERAL	<sup>6</sup> Well Number 12F
<sup>7</sup> OCRD No. 5380	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 6047

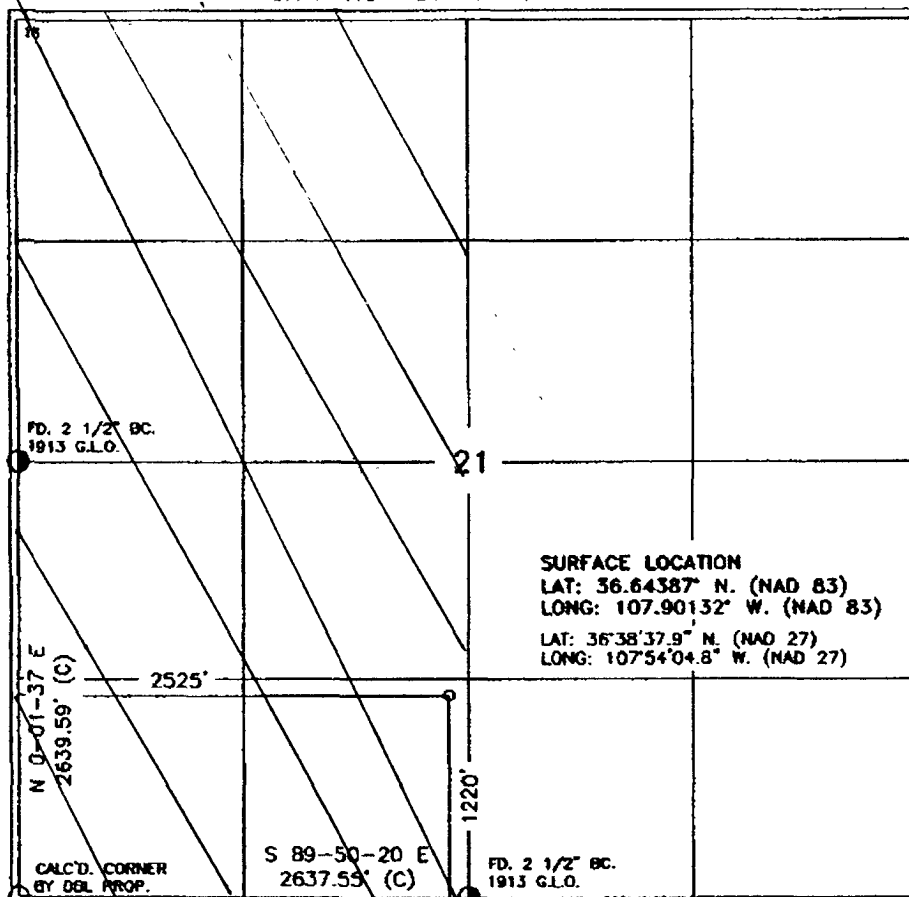
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	28-N	10-W		1220	SOUTH	2525	WEST	SAN JUAN

<sup>11</sup> Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres W 2 320			<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<sup>17</sup> OPERATOR CERTIFICATION

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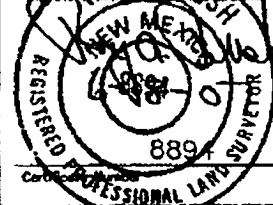
Kylaughan 8/2/07  
Signature Date  
Kylaughan  
Printed Name

<sup>18</sup> 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.

DECEMBER 27, 2006

Date of Survey  
Surveyor's Name and Title



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

Form C-103

May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. <b>30-045-34383</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: <b>KUTZ FEDERAL</b>
8. Well Number <b>#12F</b>
9. OGRID Number <b>5380</b>
10. Pool name or Wildcat <b>BASIN DK/WC BASIN MC/OTERO CH</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>6047' GROUND ELEVATION</b>
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>
Pit type <b>DRILL</b> Depth to Groundwater <b>&gt;100</b> Distance from nearest fresh water well <b>&gt;1000</b> Distance from nearest surface water <b>&gt;1000</b>
Pit Liner Thickness: <b>12</b> mil Below-Grade Tank: Volume <b>8000</b> bbls; Construction Material

**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
2. Name of Operator <b>XTO Energy Inc.</b>
3. Address of Operator <b>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401</b>
4. Well Location Unit Letter <b>N</b> : <b>1220</b> feet from the <b>SOUTH</b> line and <b>2525</b> feet from the <b>WEST</b> line Section <b>21</b> Township <b>28N</b> Range <b>10W</b> NMPM <b>NMPM</b> County <b>SAN JUAN</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>6047' GROUND ELEVATION</b>
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>
Pit type <b>DRILL</b> Depth to Groundwater <b>&gt;100</b> Distance from nearest fresh water well <b>&gt;1000</b> Distance from nearest surface water <b>&gt;1000</b>
Pit Liner Thickness: <b>12</b> mil Below-Grade Tank: Volume <b>8000</b> 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: **PIT** ☒

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 plans to install a lined 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 **08/03/2007**  
Type or print name **Kyla Vaughan** E-mail address: **kyla\_vaughan@xtoenergy.com** Telephone No. **505-564-6726**

For State Use Only

APPROVED BY **[Signature]** TITLE **Deputy Oil & Gas Inspector, District #3** DATE **OCT 26 2007**

Conditions of Approval, if any:

EXHIBIT D

Operator Certification:

a. Permitting and Compliance:

Kyla Vaughan  
Regulatory Compliance  
XTO Energy Inc.  
2700 Farmington Avenue, Bldg K, Ste 1  
Farmington, NM 87401  
505-324-1090

b. Drilling and Completions:

John Egelston  
XTO Energy Inc.  
2700 Farmington Avenue, Bldg K, Ste 1  
Farmington, NM 87401  
505-324-1090

c. Certification:

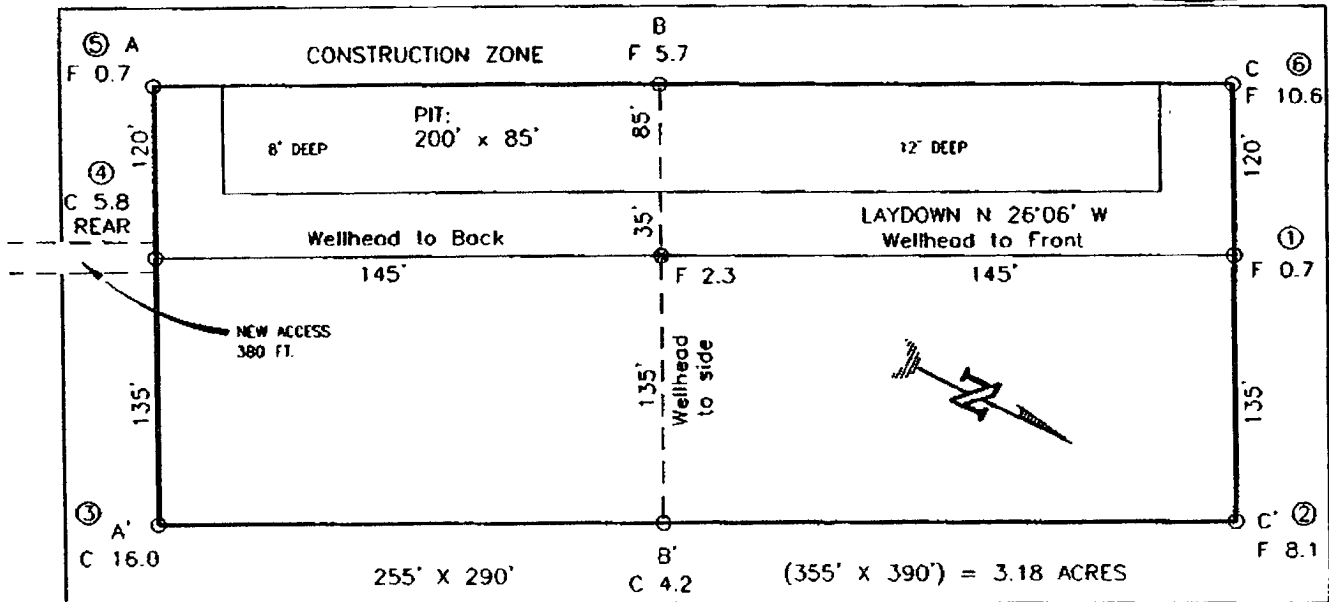
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be preformed by XTO Energy Inc. and its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided by XTO Energy Inc. This statement is subject to provisions of 18 U.S.C. § 1001 for the filing of a false statement.

Signature: \_\_\_\_\_

 8/3/07  
Kyla Vaughan

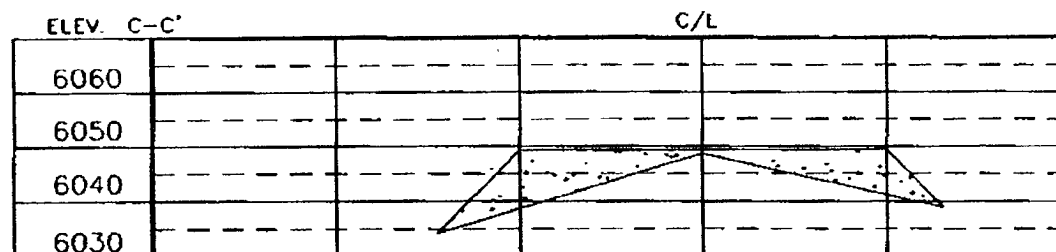
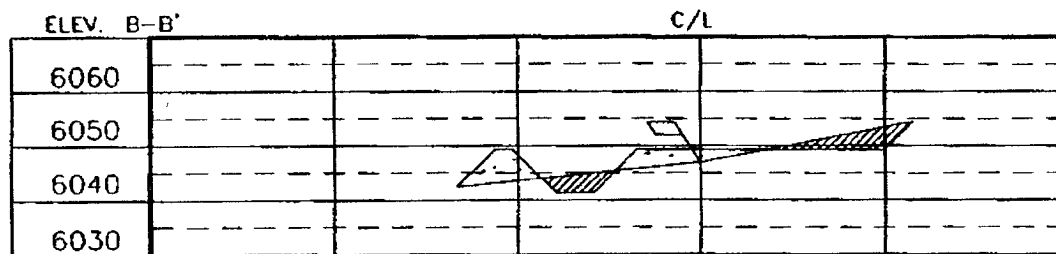
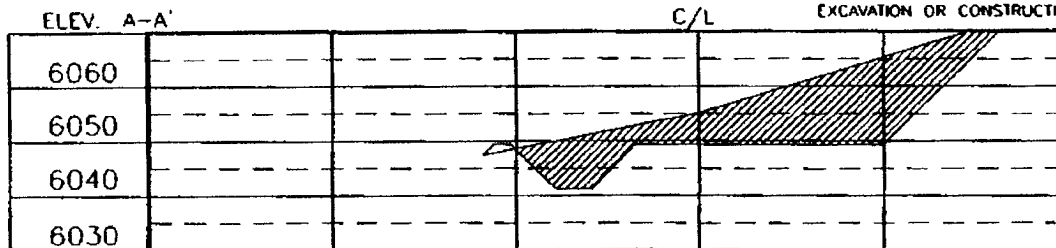
XTO ENERGY INC.  
KUTZ FEDERAL No. 12F, 1220 FSL 2525 FWL  
SECTION 21, T28N, R10W, N.M.P.M., SAN JUAN COUNTY, N.M.  
GROUND ELEVATION: 6047' DATE: DECEMBER 27, 2006

NAD 83  
LAT. = 36.64387° N  
LONG. = 107.90132° W  
NAD 27  
LAT. = 36°38'37.9" N  
LONG. = 107°54'04.8" W



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.


 <p><b>Daggett Enterprises, Inc.</b> Surveying and Oil Field Services P. O. Box 15068 Farmington, NM 87401 Phone (505) 376-1772 • Fax (505) 376-6019 NEW MEXICO U.S. No. 8894 Cadastral CR785-CFB</p>	<p>DATE: 3/23/07</p>
	<p>DATE: 3/23/07</p>

EXHIBIT E

# XTO ENERGY INC.

Kutz Federal #12F

APD Data

August 2, 2007

Location: 1220' FSL x 2525' FWL Sec 21, T28N, R10W County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 7070'

OBJECTIVE: Basin Dakota / Otero Chacra / Basin Mancos

APPROX GR ELEV: 5865'

Est KB ELEV: 6047' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 7070'
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 12.25" 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 ( $\pm 7070'$ ) in 7.875" 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'-7070'	7070'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.19	1.42	1.84

## 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/sk.

*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  $\pm 7070'$  in 7.875" hole. DV Tool set @  $\pm 4100'$

1<sup>st</sup> Stage

LEAD:

$\pm 243$  sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

TAIL:

150 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2<sup>nd</sup> Stage

LEAD:

$\pm 341$  sx of Type III or equivalent cement with 8% gel & 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 1725 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: None.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (7070') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7070') to 400'.

**EXHIBIT F**

6. FORMATION TOPS:

Est. KB Elevation: 6047'

FORMATION	Sub-Sea	TVD	MD	FORMATION	TV Sub-Sea	TVD	MD
Ojo Alamo SS	5056	1003	1006	Gallup	473	5586	5640
Kirtland Shale	4925	1134	1138	Greenhorn	-302	6361	6424
Farmington SS				Graneros	-361	6420	6483
Fruitland Formation	4498	1561	1569	Dakota 1*	-394	6453	6517
Lower Fruitland Coal	3998	2061	2076	Dakota 2*	-417	6476	6540
Pictured Cliffs SS	3974	2085	2099	Dakota 3*	-478	6537	6602
Lewis Shale	3805	2254	2271	Dakota 4*	-552	6611	6676
Chacra SS	3008	3051	3077	Dakota 5*	-582	6641	6707
Cliffhouse SS*	2403	3656	3688	Dakota 6*	-612	6671	6738
Menefee**	2311	3748	3782	Burro Canyon	-672	6731	6798
Point Lookout SS*	1700	4359	4400	Morrison*	-726	6785	6853
Mancos Shale	1325	4734	4779	TD	-941	7,000	7070

\* 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
Justin Niederhofer	Drilling Engineer	505-566-7946	505-320-0158
Jerry Lacy	Drilling Superintendent	505-566-7917	505-320-6543
John Klutsch	Project Geologist	817-885-2800	--

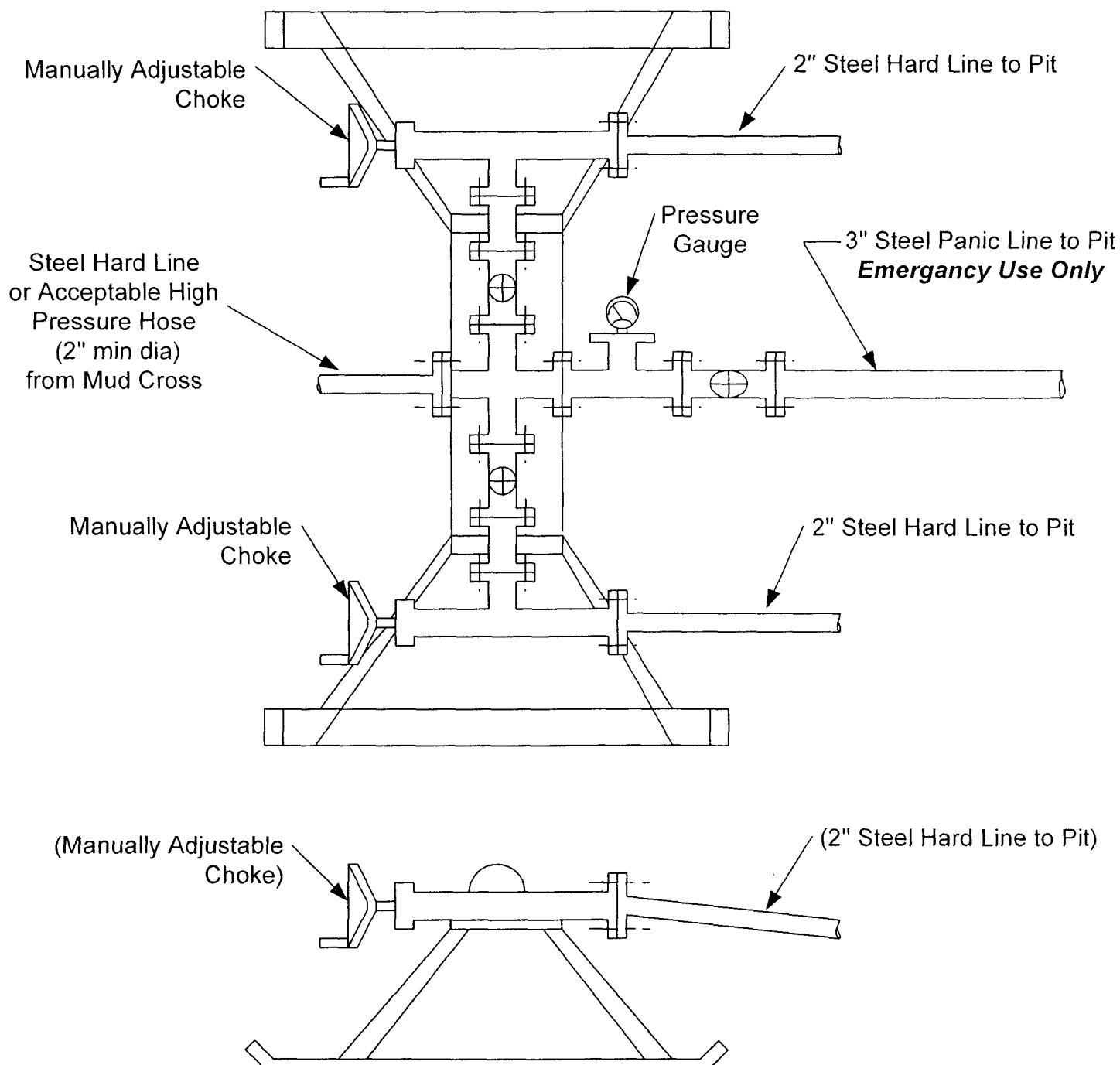
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EXHIBIT F

# **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**



**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 10 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.

