

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

070 Farmington, NM

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

XTO Energy Inc.

3. ADDRESS AND TELEPHONE NO.

2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1,110' FSL & 1,665' FEL Sec 21, T30N, R11W

At proposed prod. zone

same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

See enclosed surface use program

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT. 928'

(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

317.88

17. NO. OF ACRES ASSIGNED TO THIS WELL

317.88 E/2

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 55'

19. PROPOSED DEPTH 4,950'

20. ROTARY OR CABLE TOOLS 0'-4,950' w/Rotary Tools

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

5,785' GL

22. APPROX. DATE WORK WILL START\*

Winter 2004

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8", J-55	24#	360'	200 sx Type III
7-7/8"	4-1/2", J-55	10.5#	4,950'	Lead: 425 sx Lite Weight Cmt
				Tail: 150 sx Premium Lite Cmt

\*This information is subject to technical and administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

XTO Energy Inc. request approval to drill the above mentioned well as described in the enclosed surface use plan.

An El Paso Field Services well tie plat is also enclosed for ROW.

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

APD/ROW

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

TITLE Drilling Engineer

DATE 9/17/03

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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:

/s/ David J. Mankiewicz

JAN 28 2004

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-10  
Revised August 15, 200

DISTRICT II  
811 South First, Artesia, N.M. 88210

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

REC'D / SAN JUAN

OIL CONSERVATION DIVISION

APR 10 2003

2040 South Pacheco  
Santa Fe, NM 87505

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 30-045-31925	<sup>2</sup> Pool Code 72319	<sup>3</sup> Pool Name BLANCO MESAVERDE
<sup>4</sup> Property Code 22597	<sup>5</sup> Property Name BRUINGTON GAS COM C	<sup>6</sup> Well Number 18
<sup>7</sup> GRID No. 167067	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 5785'

<sup>10</sup> Surface Location

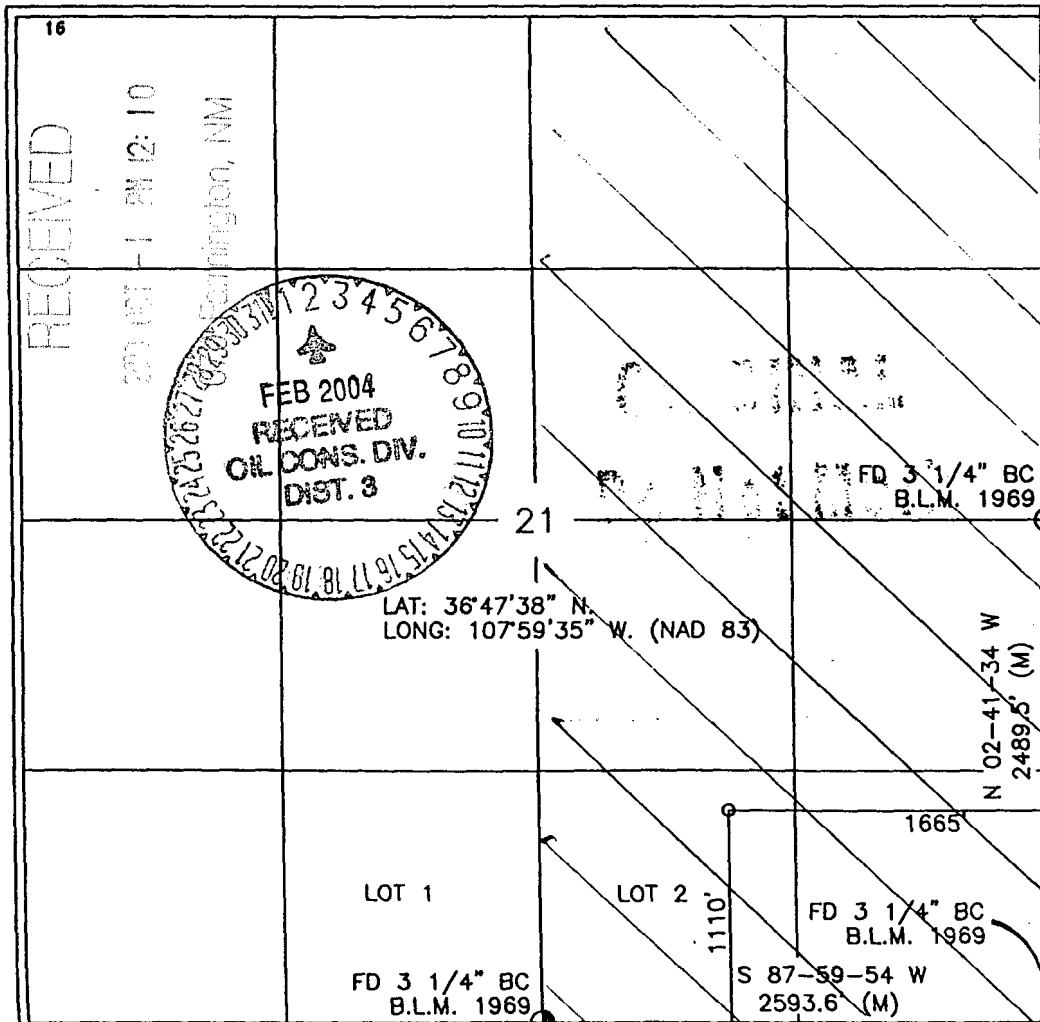
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	21	30-N	11-W		1110	SOUTH	1665	EAST	SAN JUAN

<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 317.88	<sup>13</sup> Joint or Infill E/2	<sup>14</sup> Consolidation Code I	<sup>15</sup> Order No.
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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

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

Signature: *Jeffrey W. Patton*  
Printed Name: JEFFREY W. PATTON  
Title: DRILLING ENGINEER  
Date: 9-17-03

<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.

Date of Survey: 4-17-03  
Signature and Seal of Professional Surveyor: *David A. Johnson*  
REGISTERED PROFESSIONAL SURVEYOR  
Certificate Number: 14827

**XTO Energy Inc.**  
**Bruington Gas Com C #1B**  
**APD Data**  
**September 17, 2003**

**Location:** 1,110' FSL & 1,665' FEL, Sec 21, T30N, R11W

**County:** San Juan    **State:** New Mexico

**PROJECTED TOTAL DEPTH:** ±4,950'  
**GR ELEV:** 5,785'

**OBJECTIVE:** Mesaverde  
**Est KB ELEV:** 5,797' (12' AGL)

**1. MUD PROGRAM:**

INTERVAL	0' to 400'	400' to 4,700'	4,700' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	PolyPlus
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. 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:**            8-5/8" casing to be set at ± 360' in 8.8 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#	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.

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'-TD	4,950'	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.

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

Lead:  $\pm 200$  sx of Type III (or equivalent) containing accelerator and LCM, typically mixed at 14.5 ppg, 1.41 ft<sup>3</sup>/sk, & 6.30 gal wtr/sk.

*Total slurry volume is 282 ft<sup>3</sup>, >100% excess of calculated annular volume to 360'.*

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

Lead: 425 sx of Type III (or equivalent) cement containing 8% gel and LCM(s) typically mixed at 11.4 ppg, 3.03 ft<sup>3</sup>/sk, 18.51 gal wtr/sx.

Tail: 150 sx of Premium Lite High Strength (or equivalent) cement containing gel, dispersants, fluid loss additive, salt and typically mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx..

1590 ft<sup>3</sup>

*Total estimated slurry volume for the 4-1/2" production casing is ~~1,889~~ ft<sup>3</sup>.*

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

**5. LOGGING PROGRAM:**

A. Mud Logger: There are no plans to use a mud logger at this time.

B. Open Hole Logs as follows: Run Dual Induction/MSFL/GR/SP fr/TD to the bottom of the surface csg. Run CNL/LDT (Lithodensity)/GR/Cal and Pe from TD to 2,000'.

**6. FORMATION TOPS:**

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+5002'	795'
Kirtland Shale	+4925'	872'
Farmington SS	+4573'	1224'
Fruitland Formation	+3951'	1846'
Lower Fruitland Coal	+3675'	2122'
Pictured Cliffs SS	+3623'	2174'
Lewis Shale	+3462'	2335'
Chacra SS	+2606'	3191'
Cliffhouse SS*	+2063'	3734'
Menefee*	+1915'	3882'
Point Lookout SS*	+1330'	4467'
Mancos Shale	+950'	4847'
Projected TD	+847'	4950'

\* Target Reservoir. Maximum anticipated reservoir pressure will be  $\pm 1,550$  psig.

# 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 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.
5. Have kelly cock valve with handle available.
6. Have safety valve and subs to fit all sizes of drill string.

