

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

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

1685' FSL & 965' FEL in Sec 3, T30N, R12W

At proposed prod. zone

same as above

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

9 air miles northwest of the Flora Vista Post Office

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 965'

16. NO. OF ACRES IN LEASE

+2,410.24

17. NO. OF ACRES ASSIGNED
TO THIS WELL

318.65 E/2

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

75'

19. PROPOSED DEPTH

2,375'

20. ROTARY OR CABLE TOOLS

0-2,375' with Rotary Tools

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

5,814' Ungraded Ground Level

22. APPROX. DATE WORK WILL START*

Winter 2003

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7", J-55	20.0#/ft	+200'	75 sx Type III or C1 B cement
6-1/4"	4-1/2", J-55	10.5#/ft	+2,375'	195 sx Premium Lite cement

XTO ENERGY INC. Request approval to drill the above mentioned well as described in the enclosed Surface Use Plan and proposed Drilling Program.

Note: Due to this well being located on existing location, No pipeline ROW is required.

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

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

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

2/18/03

(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:

APPROVED BY

David J. Mankiewicz

TITLE

DATE

MAR 19 2003

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any statement 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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-31409	² Pool Code 71679	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 22620	⁵ Property Name L. C. KELLY	⁶ Well Number 13
⁷ GRID No. 167067	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 5814'

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
1	3	30-N	12-W		1685	SOUTH	965	EAST	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
¹² Dedicated Acres 318.65 E/Z			¹³ Joint or Infill I-		¹⁴ Consolidation Code		¹⁵ 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

LOT 8	LOT 7	LOT 6	LOT 5
LOT 9	LOT 10	LOT 11	LOT 12
LOT 16	LOT 15	LOT 14	LOT 13
LOT 17	LOT 18	LOT 19	LOT 20

MAR 2003
OIL CONSERVATION DIV.
DIST. I

QTR. CORNER
FD 3 1/4" BC
BLM 1976

LAT: 36°50'19" N. (NAD 83)
LONG: 108°04'48" W.

QTR. CORNER
FD 3 1/4" BC
BLM 1975

SEC. CORNER
FD 3 1/4" BC
BLM 1975

N 89-55-21 W
2592.34' (M)

N 01-30-28 W
2665.66' (M)

981'
331'
352'
1685'

070 FARMINGTON, NM
2008 FEB 19 AM 11:30
RECEIVED

17 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
DRILLING ENGINEER
Title
Z-18-03
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.

Date of Survey
Signature and Seal
14827
REGISTERED PROFESSIONAL SURVEYOR
Certificate Number

XTO ENERGY INC.

DRILLING PROCEDURE

LC KELLY #13

Basin Fruitland Coal

February 18, 2003

Location: 1,685' FSL & 965' FEL, Sec 3, T30N, R12W County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 2,375' OBJECTIVE: Fruitland Coal GR ELEV: 5,814'

1. MUD PROGRAM:

INTERVAL	0'-200'	200'-TD
HOLE SIZE	8-3/4"	6-1/4"
MUD TYPE	FW/Native	FW/Polymer
MUD WEIGHT, ppg	8.6-9.0	8.6-9.1
VISCOSITY, sec/qt	28-32	28-33
WATER LOSS, cc	NC	NC

Remarks: Drill the surface hole with fresh water. Run and cement 7" surface casing, circulating cement to surface. NU and test BOP equipment, then drill out with fresh water. Use polymer sweeps as needed for hole cleaning. At TD, sweep the hole prior to TOH to log.

2. CASING PROGRAM:

Surface Casing: 7" casing to be set at $\pm 200'$ in 8.8 ppg mud.

Interval	Length	Wt (ppf)	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	DD (in)	SF Coll	SF Burst	SF Tension
0'-200'	200'	20#	J-55	STC	2,270	3,740	234	6.456	6.331	9.99	4.59	58.5

Optimum makeup torque for 7" 20#, J-55, STC casing is **2,340 ft-lbs** (Min - 1,760 ft-lbs, Max - 2,930 ft-lbs).

Production Casing: 4-1/2" casing to be set at $\pm 2,375'$ in 8.8 ppg mud.

Interval	Length	Wt (ppf)	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	DD (in)	SF Coll	SF Burst	SF Tension
0'-TD	2,375'	10.5#	J-55	STC	4,010	4,790	132	4.052	3.927	3.57	3.33	5.24

Optimum makeup torque for 4-1/2", 10.5#, J-55, casing is **1,320 ft-lbs** (Min - 990 ft-lbs, Max - 1,650 ft-lbs).

Capacity of 7", 20# casing is: 0.04048 bbl/ft

Capacity of 4-1/2", 10.5# casing is: 0.01595 bbl/ft

EXHIBIT D
EXHIBIT D

3. **WELLHEAD:**

Casinghead: Larkin Fig 92 (or equivalent) 2,000 psig WP (4,000 psig test) with 7", 8rd pin on bottom and 8-5/8" API Modified 8rd thread on top.

Tubinghead: Larkin Model 612 (or equivalent) 2,000 psig WP (4,000 psig test) with 4-1/2", 8rd bottom thread and 8-5/8" 8rd API Modified top body thread, 4.090" minimum bore.

4. **CEMENT PROGRAM:**

A. **Surface:** 7", 20#, J-55, STC casing at $\pm 200'$.

Lead: 75 sx Type III cement (or equivalent) containing 1/4 pps celloflake, 2% CaCl_2 (mixed at 14.6 ppg, 1.39 ft³/sk, 6.67 gal wtr/sk).

Total slurry volume is 104.25 ft³, 250% excess of calculated annular volume required to circulate cement to surface.

B. **Production:** 4-1/2", 10.5#, J-55, STC casing at $\pm 2,375'$.

Lead: 125* sx of Type III cement containing 8% gel, 1/4 pps Celloflake & 2% Phenoseal (mixed at 11.4 ppg, 3.03 ft³/sk, 18.51 gal wtr/sk).

Tail: 70 sx Type III cement containing 1% CaCl_2 , 1/4 pps Celloflake & 2% Phenoseal (mixed at 14.5 ppg, 1.41 ft³/sk, 6.72 gal wtr/sx).

Total estimated slurry volume is 477 ft³, $\pm 100\%$ excess of calculated annular volume required to circulate cement to surface.

* Actual cement volumes will be determined using log caliper volume plus 40% excess.

5. **DRILLING HAZARDS:**

- H₂S or other Poisonous Gases: No formations known to contain H₂S or any other poisonous gases will be penetrated with this wellbore.
- Abnormal Pressures: No overpressured zones are known to exist or are anticipated to be encountered during the drilling of this well.
- Lost Circulation: Seepage and/or lost circulation may be encountered below surface casing and can be controlled with conventional lost circulation materials added to the mud system.

6. **LOGGING PROGRAM:**

Array Induction/DFL/GR/SP/Cal
DSN/Spectral Density/GR/Cal/Pe

TD to bottom of surf csg. .
TD to bottom of surf csg.

EXHIBIT D

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

ROTATING HEAD
OR STRIPPING
(DIVERTING)
HEAD

FILL UP LINE

FLOW LINE
TO PIT

PIPE
RAMS

BLIND
RAMS

SCREW ON
DRILLING FLANGE

FILL-UP /
KILL LINE
2" dia min.

TO
ADJUSTABLE
CHOKE
MANIFOLD
2" dia min.

Fig. 92 (typical)
CASINGHEAD
(SCREW-IN)

CASING COLLAR
(LOOKING UP)

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.

TESTING
PROCEDURE

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

See Choke Manifold drawing for
specifications

EXHIBIT D