

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

1190' FNL & 1050' FWL 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) 1050'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT. 75'

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

5,933' Ungraded Ground Level

16. NO. OF ACRES IN LEASE

+2,410.24

19. PROPOSED DEPTH

2,475' DIST. 3

17. NO. OF ACRES ASSIGNED

TO THIS WELL

318.41

20. ROTARY OR CABLE TOOLS

0-2,475' with Rotary Tools

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	+2,475'	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:

/s/ David J. Mankiewicz

MAR 19 2003

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 Federal 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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-31410	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 22620	⁵ Property Name L. C. KELLY	⁶ Well Number 14
⁷ GRID No. 167067	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 5933'

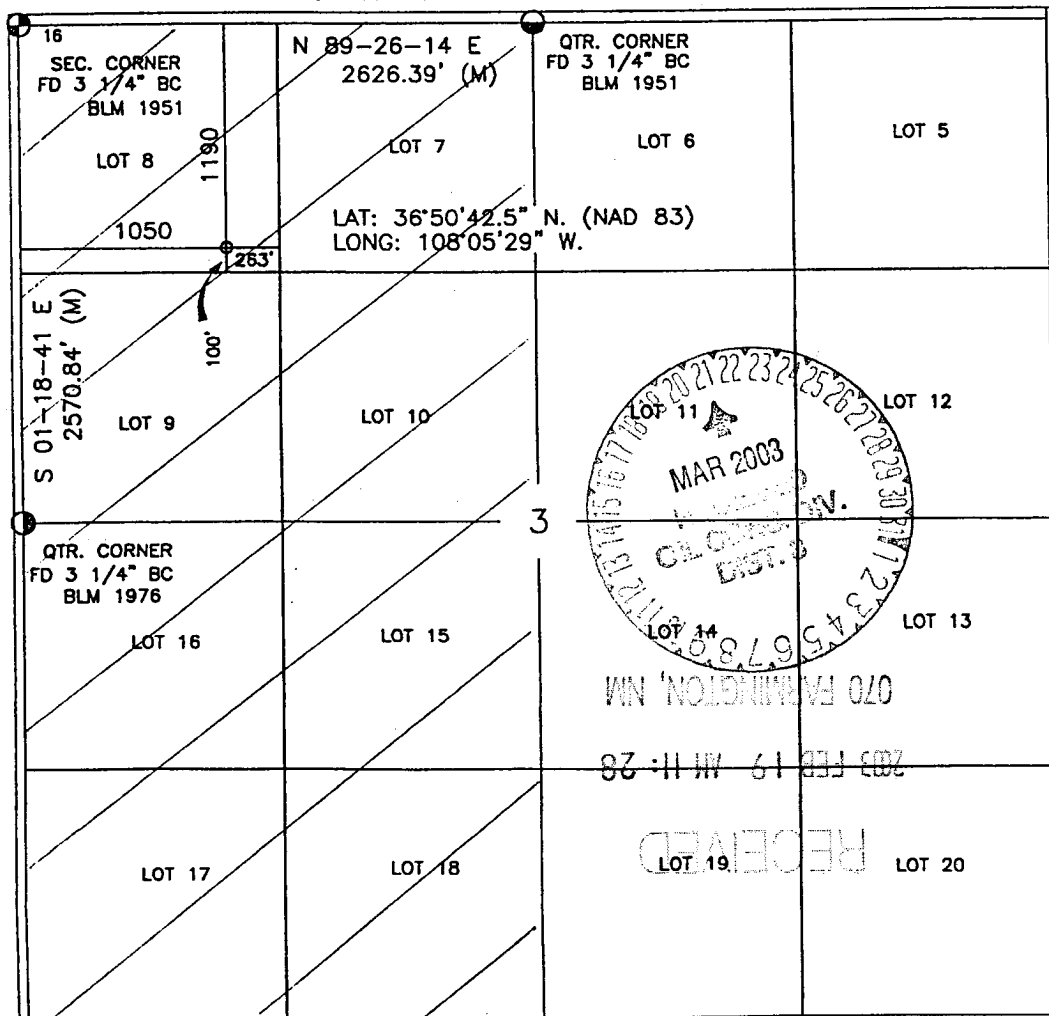
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	3	30-N	12-W		1190	NORTH	1050	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
¹² Dedicated Acres 318.41 W/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



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 JEFFREY W PATTON
Title DILLING ENGINEER
Date 2-18-03

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 12-11-02
Signature and Seal of Professional Surveyor:
14827
Certificate Number 14827

XTO ENERGY INC.

DRILLING PROCEDURE

LC KELLY #14

Basin Fruitland Coal

February 18, 2003

Location: 1,190' FNL & 1,050' FWL, Sec 3, T30N, R12W County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 2,475' OBJECTIVE: Fruitland Coal GR ELEV: 5,933'

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 $\pm 2,475'$ 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	2,475'	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

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 $\pm 2,475'$.

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

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).

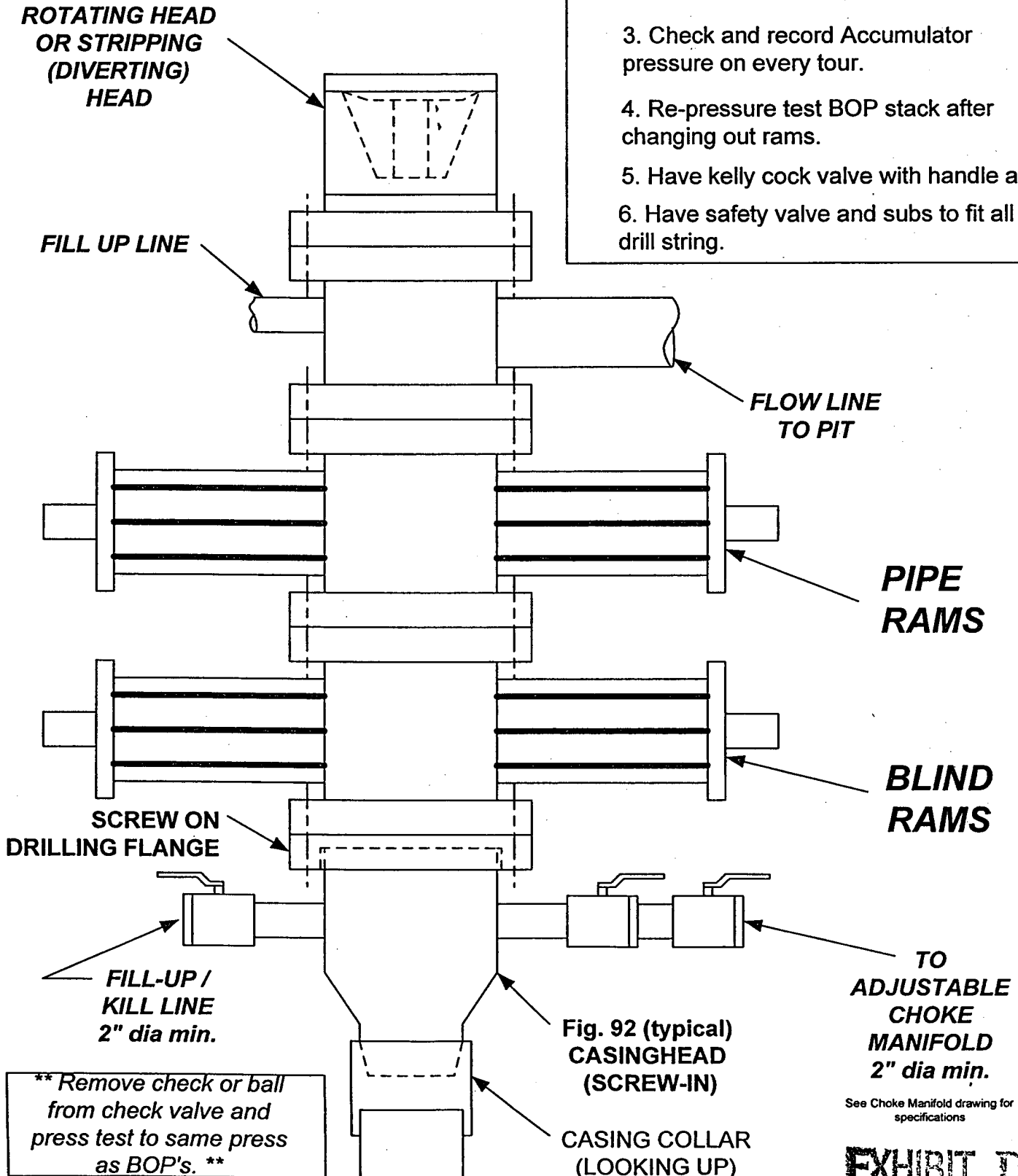
2. Test operation of (both) rams on every trip.

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.



See Choke Manifold drawing for specifications

EXHIBIT D