

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires January 31, 2004


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF - 078019
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 20
2. Name of Operator XTO Energy Inc.		7. Unit or CA Agreement Name and No. NM
3a. Address 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM	3b. Phone No. (include area code)	8. Lease Name and Well No. EH Pipkin #35
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1420' FNL x 1245' FWL in Sec 12, T27N, R11W At proposed prod. zone		9. API Well No. 30045 32030
14. Distance in miles and direction from nearest town or post office* 15 miles Southeast of the Bloomfield, NM post office		10. Field and Pool, or Exploratory Basin Fruitland Coal
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1,214'		11. Sec., T., R., M., or Blk. and Survey or Area E Sec 12, T27N, R11W
16. No. of Acres in lease +2560.96		12. County or Parish San Juan
17. Spacing Unit dedicated to this well 320 acres N/2		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 75'		20. BLM/BIA Bond No. on file
19. Proposed Depth 2,000'		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,964' Ungraded Ground Level		22. Approximate date work will start* Winter 2004
		23. Estimated duration 2 weeks

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) Jeffrey W. Patton	Date 11/25/03
Title Drilling Engineer		
Approved by (Signautre)	Name (Printed/Typed) David J. Markiewicz	Date JAN 23 2004
Title Office		

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 Reverse)

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".

APD/ROW

NMOC

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

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

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-32030	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 22853	⁵ Property Name E.H. PIPKIN	⁶ Well Number 35
⁷ GRID No. 167067	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 5964

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
E	12	27-N	11-W		1420	NORTH	1245	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 320 N/2		¹³ Joint or Infill		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

<p>16</p> <p>SEC. CORNER FD 2 1/2" BC GLO 1913</p> <p>1420'</p> <p>1245'</p> <p>S 00°04'00" W 5267.9' (M)</p> <p>N 89°34'13" E 5286.1' (M)</p> <p>LAT: 36°35'35" N. (NAD 83) LONG: 107°57'36" W. (NAD 83)</p> <p>12</p> <p>ORIGINAL</p> <p>RECEIVED OIL CONSERVATION DIVISION NOV 26 PM 1:20</p> <p>SEC. CORNER FD 2 1/2" BC GLO 1913</p>	<p>17</p> <p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Jeffrey W. Patton</i></p> <p>Signature</p> <p>JEFFREY W. PATTON</p> <p>Printed Name</p> <p>DRILLING ENGINEER</p> <p>Title</p> <p>11-25-03</p> <p>Date</p>	<p>18</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>DAVID A. JOHNSON</p> <p>NEW MEXICO</p> <p>REGISTERED PROFESSIONAL SURVEYOR</p> <p>14827</p> <p>Certificate Number</p>
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XTO ENERGY INC.

DRILLING PROCEDURE

EH Pipkin #35

Basin Fruitland Coal

November 25, 2003

Location: 1,420' FNL & 1,245' FWL, Sec 12, T27N, R11W County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 2,000' OBJECTIVE: Fruitland Coal GR ELEV: 5,964'

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 $\pm 2,000'$ 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	2,000'	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

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.

EXHIBIT E

4. **CEMENT PROGRAM:**

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

Lead: 75 sx Type III cement (or equivalent) containing $\frac{1}{4}$ 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 $\pm 2,000'$.

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: 75 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/sk).

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.

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

ROTATING HEAD
OR STRIPPING
(DIVERTING)
HEAD

FILL UP LINE

FLOW LINE
TO PIT

BLIND
RAMS

PIPE
RAMS

SCREW ON
DRILLING FLANGE

FILL-UP /
KILL LINE
2" dia min.

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

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

CASING COLLAR
(LOOKING UP)

TO
ADJUSTABLE
CHOKE
MANIFOLD
2" dia min.

See Choke Manifold drawing for
specifications

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

EXHIBIT E