

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<br><input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER   |  | 5. Lease Serial No.<br><b>SF - 078019</b>  |  |
| 1b. Type of Well<br><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<br><b>1:18</b>  |  |
| 2. Name of Operator<br><b>XTO Energy Inc.</b>  |  | 7. Unit or CA Agreement Name and No.<br><b>22853</b>   |  |
| 3a. Address<br><b>2700 Farmington Ave., Bldg. K, Ste 1 Farmington, NM</b>  |  | 8. Lease Name and Well No.<br><b>EH Pipkin #34</b>   |  |
| 3b. Phone No. (include area code)  |  | 9. API Well No.<br><b>30 045 32032</b>   |  |
| 4. Location of Well (Report location clearly and in accordance with any State requirements)*<br>At surface <b>1785' FSL x 1625' FEL in Sec 12, T27N, R11W</b><br>At proposed prod. zone                                  |  | 10. Field and Pool, or Exploratory<br><b>Basin Fruitland Coal</b>  |  |
| 14. Distance in miles and direction from nearest town or post office*<br><b>15 miles Southeast of the Bloomfield, NM post office</b>   |  | 11. Sec., T., R., M., or Blk. and Survey or Area<br><b>J Sec 12, T27N, R11W</b>  |  |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)<br><b>865'</b>  |  | 12. County or Parish<br><b>San Juan</b>  |  |
| 16. No. of Acres in lease<br><b>+2560.96</b>   |  | 13. State<br><b>NM</b>   |  |
| 17. Spacing Unit dedicated to this well<br><b>320 acres S/2</b>  |  | 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.<br><b>75'</b> |  |
| 19. Proposed Depth<br><b>1,925'</b>  |  | 20. BLM/BIA Bond No. on file   |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br><b>5,900' Ungraded Ground Level</b>   |  | 22. Approximate date work will start*<br><b>Winter 2004</b>  |  |
|  |  | 23. Estimated duration<br><b>2 weeks</b>   |  |

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<br><i>Jeffrey W. Patton</i>             | Name (Printed/Typed)<br><b>Jeffrey W. Patton</b> | Date<br><b>11/25/03</b>     |
| Title<br><b>Drilling Engineer</b>                     |  |                             |
| Approved by (Signature)<br><i>David J. Mankiewicz</i> | Name (Printed/Typed)                             | Date<br><b>JAN - 6 2004</b> |
| Title<br><b>Office</b>                                |  |                             |

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

**APD/ROW**

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

NMOCD

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

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, NM 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|   |   |                                 |  |
|---|---|---------------------------------|--|
| <sup>1</sup> API Number<br>30-045-32032 |   | <sup>2</sup> Pool Code<br>71629 | <sup>3</sup> Pool Name<br>Basin Fruitland Coal |
| <sup>4</sup> Property Code<br>22453     | <sup>5</sup> Property Name<br>E.H. PIPKIN     |                                 | <sup>6</sup> Well Number<br>34                 |
| <sup>7</sup> OGRID No.<br>167067        | <sup>8</sup> Operator Name<br>XTO ENERGY INC. |                                 | <sup>9</sup> Elevation<br>5900                 |

<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   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| J             | 12      | 27-N     | 11-W  |         | 1785          | SOUTH            | 1625          | EAST           | SAN JUAN |

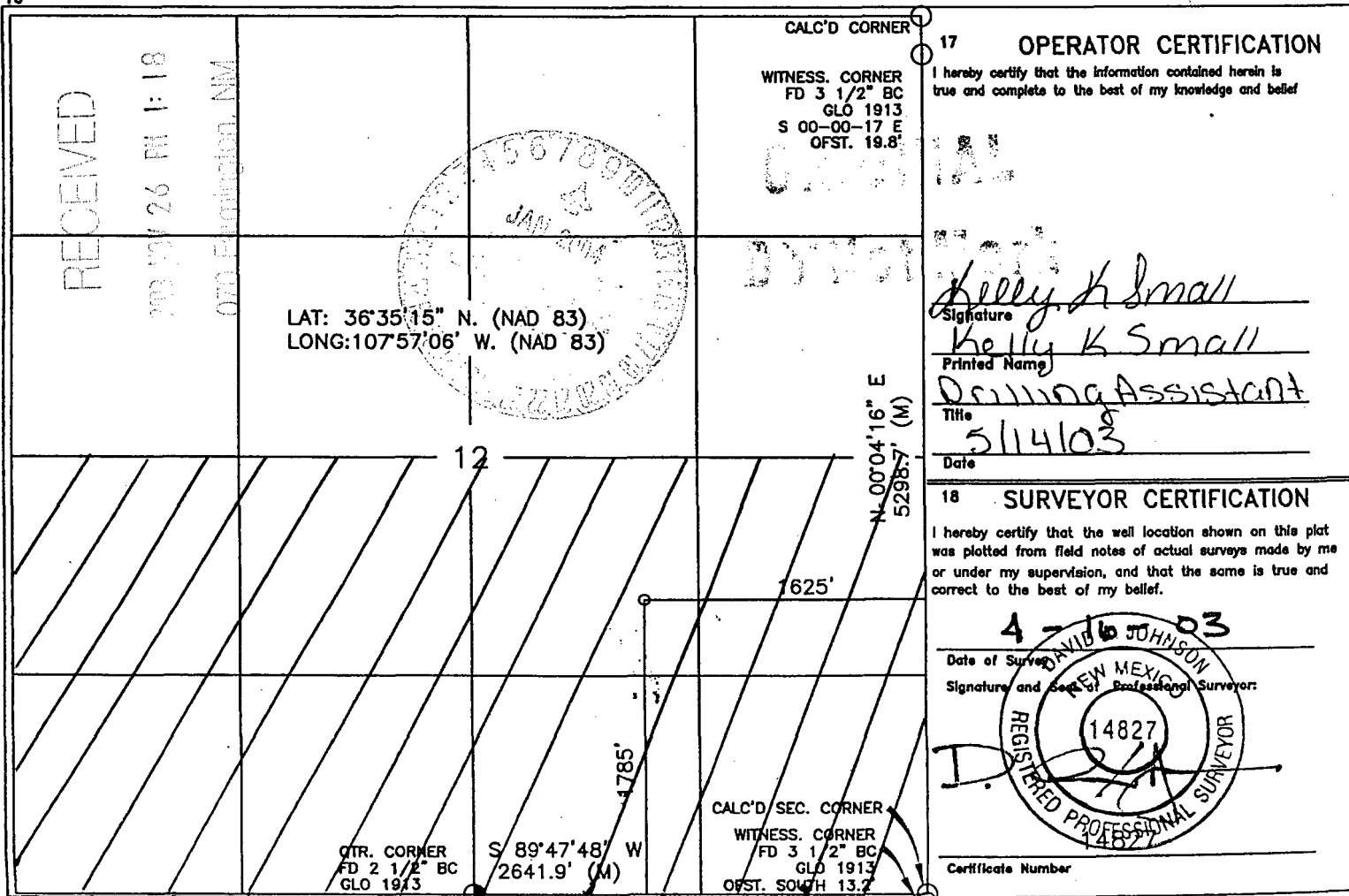
<sup>11</sup> Bottom Hole Location If Different From Surface

| 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<br>320 S/2 | <sup>13</sup> Joint or Infill<br>I | <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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**XTO ENERGY INC.**  
**DRILLING PROCEDURE**  
**EH Pipkin #34**  
**Basin Fruitland Coal**  
**November 25, 2003**

**Location:** 1,785' FSL & 1,625' FEL, Sec 12, T27N, R11W    **County:** San Juan    **State:** New Mexico

**PROJECTED TOTAL DEPTH:** 1,925'    **OBJECTIVE:** Fruitland Coal    **GR ELEV:** 5,900'

**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 ± 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 ± 1,925' 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    | 1,925' | 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 ± 200'.

Lead: 75 sx Type III cement (or equivalent) containing ¼ pps celloflake, 2% CaCl<sub>2</sub> (mixed at 14.6 ppg, 1.39 ft<sup>3</sup>/sk, 6.67 gal wtr/sk).

Total slurry volume is 104.25 ft<sup>3</sup>, 250% excess of calculated annular volume required to circulate cement to surface.

B. Production: 4-1/2", 10.5#, J-55, STC casing at ± 1,925'.

Lead: 125\* sx of Type III cement containing 8% gel, 1/4 pps Celloflake & 2% Phenoseal (mixed at 11.4 ppg, 3.03 ft<sup>3</sup>/sk, 18.51 gal wtr/sk).

Tail: 75 sx Type III cement containing 1% CaCl<sub>2</sub>, 1/4 pps Celloflake & 2% Phenoseal (mixed at 14.5 ppg, 1.41 ft<sup>3</sup>/sk, 6.72 gal wtr/sk).

Total estimated slurry volume is 477 ft<sup>3</sup>, ±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:**

- H<sub>2</sub>S or other Poisonous Gases: No formations known to contain H<sub>2</sub>S 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 E**

# 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.

TO ADJUSTABLE CHOKE MANIFOLD 2" dia min.

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

CASING COLLAR (LOOKING UP)

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

## 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**

See Choke Manifold drawing for specifications

**EXHIBIT E**