

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2004 DEC 6

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

Lease Serial No.  
NMSF-080382

If Indian, Allottee or Tribe Name

N/A

1a. Type of work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.  
N/A

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.  
FRONTIER AZTEC A 1 E 30319

2. Name of Operator  
XTO ENERGY INC 167067

9. API Well No.  
30-045-32731

3a. Address 2700 FARMINGTON AVE., BLDG. K-1  
FARMINGTON, NM 87401

3b. Phone No. (include area code)  
(505) 324-1090

10. Field and Pool, or Exploratory  
BASIN DAKOTA 71599

4. Location of Well (Report location clearly and in accordance with any State requirements \*)

At surface 1550 FSL & 890 FWL

At proposed prod. zone SAME

11. Sec., T. R. M. or Blk. and Survey or Area

L 8-27N-11W NMPM

14. Distance in miles and direction from nearest town or post office\*  
9 AIR MILES SOUTHWEST OF BLOOMFIELD

12. County or Parish  
SAN JUAN

13. State  
NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) 890'

16. No. of acres in lease  
480

17. Spacing Unit dedicated to this well  
W2 320

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft. 385' (XTO's 8-2)

19. Proposed Depth  
6,950'

20. BLM/BIA Bond No. on file  
BLM NATIONWIDE 57 91 73

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
6,140' GL

22. Approximate date work will start\*  
07/01/2005

23. Estimated duration  
6 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.

2. A Drilling Plan.

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).

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification

6. Such other site specific information and/or plans as may be required by the  
authorized officer.

25. Signature

Name (Printed/Typed)

BRIAN WOOD

Date

11/30/2004

Title

CONSULTANT

PHONE: (505) 466-8120

FAX: (505) 466-9682

Approved by (Signature)

Name (Printed/Typed)

Date

12/15/05

Title

Office

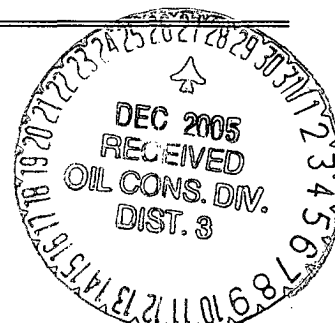
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to  
conduct operations thereon.

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 page 2)

NMOCD



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

DISTRICT II  
1301 W. Grand Avenue, Artesia, N.M. 88210

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

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87504-2088

Form C-102  
Revised June 10, 2003  
Instructions on back  
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 30-045-32731	<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name BASIN DAKOTA
<sup>4</sup> Property Code 30319	<sup>5</sup> Property Name FRONTIER AZTEC A	<sup>6</sup> Well Number 1E
<sup>7</sup> GRID No. 167067	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 6140

<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
L	8	27-N	11-W	.	1550	SOUTH	890	WEST	SAN JUAN

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

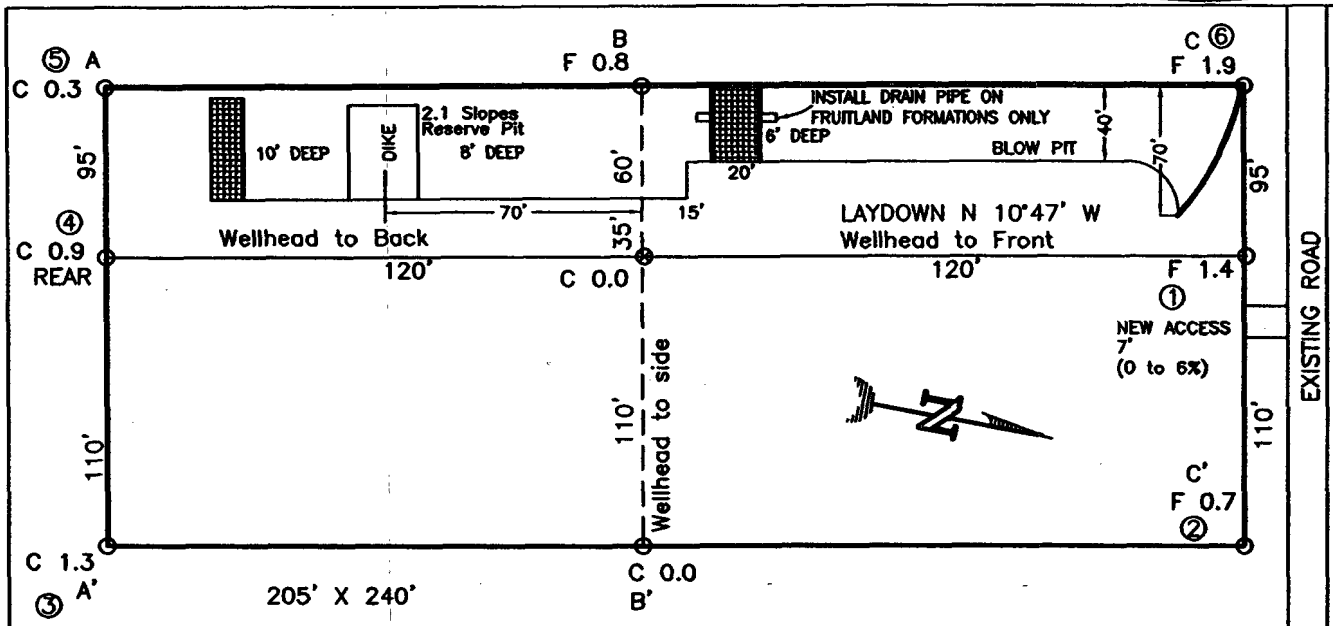
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 320			<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code C		<sup>15</sup> Order No.		

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

<p>16</p> <p>SEC. CORNER FD 2 1/2" BC 1913 GLO</p> <p>N 00°02'36" W 5282.0' (M)</p> <p>890'</p> <p>1550'</p> <p>LAT: 36°35'12" N. (NAD 27) LONG: 108°01'57" W. (NAD 27)</p> <p>N 89°56'25" E 5279.2' (M)</p> <p>SEC. CORNER FD 2 1/2" BC 1913 GLO</p>	<p>17 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>Brian Wood</i></p> <p>Signature</p> <p>BRIAN WOOD</p> <p>Printed Name</p> <p>CONSULTANT</p> <p>Title</p> <p>NOV. 30, 2004</p> <p>Date</p>	<p>18 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 knowledge.</p> <p>APR 1 2004</p> <p>Date of Survey</p> <p>Signature and Seal</p> <p>NEW MEXICO 14831 REGISTERED PROFESSIONAL SURVEYOR</p> <p>14831</p> <p>Certificate Number</p>
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XTO ENERGY INC.  
 FRONTIER AZTEC A No. 1E, 1550 FSL 890 FWL  
 SECTION 8, T27N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 6140, DATE: APRIL 7, 2004

LAT: 36°35'12" N.  
 LONG: 108°01'57" W.  
 NAD 27



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

ELEV. A-A'

C/L

ELEV. A-A'	C/L
6150	
6140	
6130	
6120	

ELEV. B-B'

C/L

ELEV. B-B'	C/L
6150	
6140	
6130	
6120	

ELEV. C-C'

C/L

ELEV. C-C'	C/L
6150	
6140	
6130	
6120	

NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

Daggett Enterprises, Inc.  
 Surveying and Oil Field Services  
 P. O. Box 15088 • Farmington, NM 87401  
 Phone (505) 326-1772 • Fax (505) 326-4019  
 NEW MEXICO L.S. No. 14831  
 GORAL CR285078  
 DATE 4/20/04



DATE 4/20/04  
 DRAWN BY A.G.  
 REVISION CR285

XTO Energy Inc.  
Frontier Aztec A 1 E  
1550' FSL & 890' FWL  
Sec. 8, T. 27 N., R. 11 W.  
San Juan County, New Mexico

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Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimiento Fm	000'	12'	+6,140'
Ojo Alamo Sandstone	695'	707'	+5,445'
Kirtland Shale	840'	852'	+5,300'
Fruitland Coal	1,650'	1,662'	+4,490'
Pictured Cliffs Ss	1,850'	1,862'	+4,290'
Chacra Sandstone	2,780'	2,792'	+3,360'
Pt. Lookout Sandstone	4,235'	4,247'	+1,905'
Mancos Shale	4,595'	4,607'	+1,545'
Gallup Sandstone	5,465'	5,477'	+675'
Huerfano	5,815'	5,827'	+325'
Greenhorn Limestone	6,300'	6,312'	-160'
Graneros Shale	6,355'	6,367'	-215'
Dakota Sandstone	6,460'	6,472'	-320'
Morrison	6,660'	6,672'	-520'
Total Depth (TD)*	6,950'	6,962'	-810'

2. NOTABLE ZONES

Gas & Oil Zones

Fruitland  
Pictured Cliffs  
Point Lookout  
Gallup  
Dakota

Water Zones

Nacimiento  
Ojo Alamo  
Fruitland

Coal Zones

Fruitland

XTO Energy Inc.  
Frontier Aztec A 1 E  
1550' FSL & 890' FWL  
Sec. 8, T. 27 N., R. 11 W.  
San Juan County, New Mexico

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Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the geologist's recommendations.

### 3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) An 8-5/8" x 11" 2,000 pound double ram BOP system with a choke manifold and mud cross will be tested to 200 psi and then to 1,000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 30 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure is  $\approx$ 2,800 psi. BOP and mud system will control pressure.

### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	<u>Setting Depth</u>
12-1/4"	8-5/8"	24	J-55	New	8 rd, S T & C	325'
7-7/8"	5-1/2"	15.5	K-55	New	8 rd, L T & C	6,950'

XTO Energy Inc.  
Frontier Aztec A 1 E  
1550' FSL & 890' FWL  
Sec. 8, T. 27 N., R. 11 W.  
San Juan County, New Mexico

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Surface casing will be cemented to surface with  $\approx 270$  cubic feet ( $\approx 230$  sacks) Class B Neat + 1/4 pound per sack cello-flake + 2%  $\text{CaCl}_2$ . Yield = 1.27 cubic feet per sack. Weight = 15.2 pounds per gallon.

Conventional centralizers will be set on the bottom two joints and every fourth joint to surface.

Production casing hole will be cemented to surface as follows. DV @  $\approx 4,000'$ .

First stage Lead will be cemented to  $\approx 4,000'$  with  $\approx 640$  cubic feet ( $\approx 464$  sacks) 50:50 Poz + 5 pounds per sack gilsonite + 2% gel + 1/4 pounds per sack cello-flake, dispersant, and FLA. Yield = 1.38 cubic feet per sack. Weight = 13.5 pounds per gallon. Excess = 25%.

Second stage Lead will be cemented to surface with  $\approx 1,095$  cubic feet ( $\approx 380$  sacks) Class B or H + 10 pounds per sack gilsonite + 4% gel + 1/2 pounds per sack cello-flake + 3% Econolite. Yield = 2.88 cubic feet per sack. Weight = 11.4 pounds per gallon. Excess = 50%

Second stage Tail will be cemented to  $\approx 3,600'$  with  $\approx 95$  cubic feet ( $\approx 76$  sacks) Class B or H Neat + 1/4 pounds per sack cello-flake + 2%  $\text{CaCl}_2$ . Yield = 1.26 cubic feet per sack. Weight = 15.2 pounds per gallon. Excess = 10%.

Conventional centralizers will be set on the bottom two joints, every second joint to  $\approx 6,000'$  and every fourth joint from  $\approx 2,000'$  to surface.

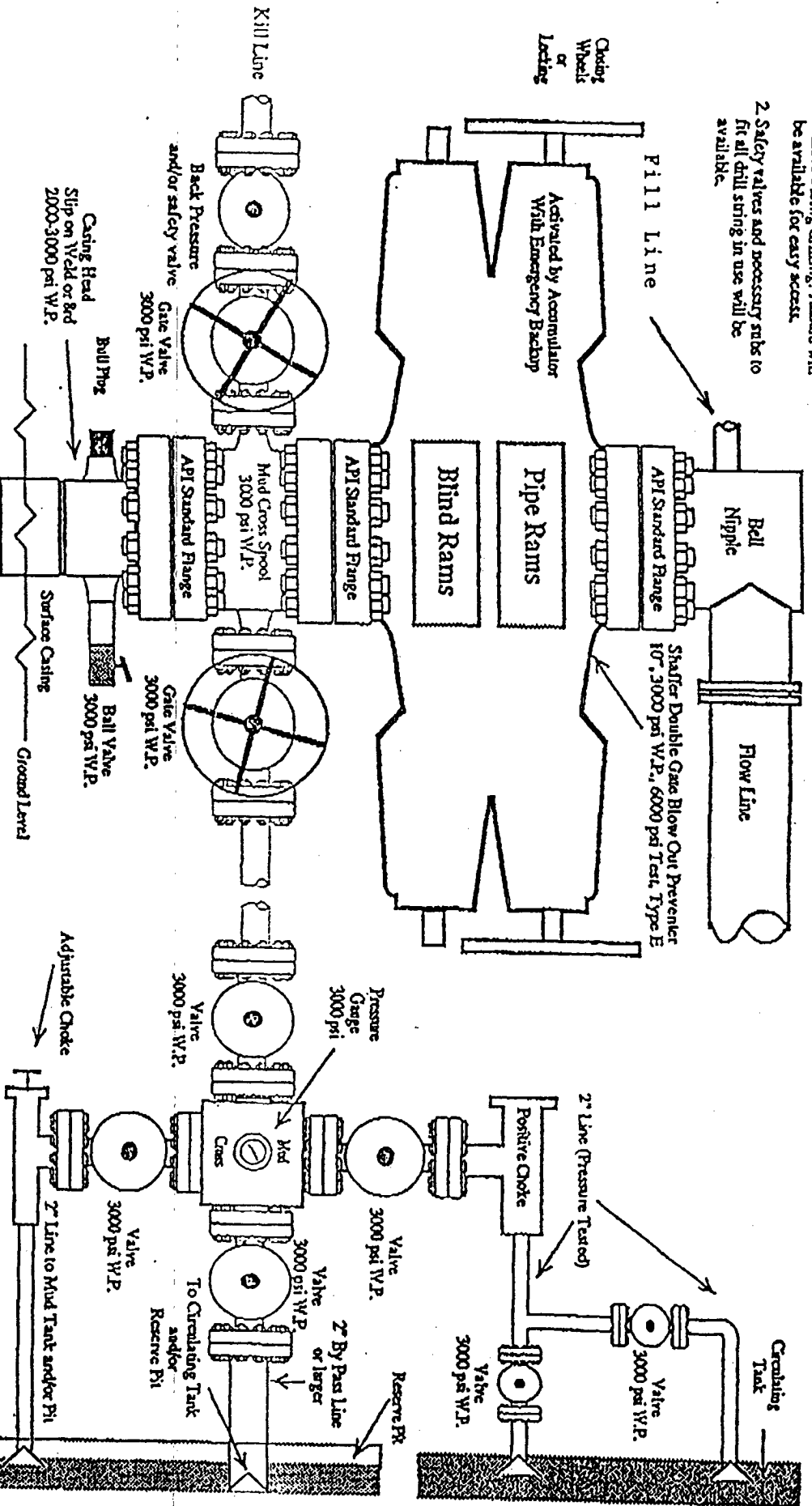
## 5. MUD PROGRAM

<u>RANGE</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>WATER LOSS</u>	<u>ADDITIVES</u>
0' - 350'	Fresh-Spud	8.5-8.8	30	NC	Gel, lime
350' - 4,000'	Fresh Water	8.5-8.8	28	NC	Gel, lime sweeps
4,000' - TD	Fresh Water	8.5-8.8	35	10 cc	Gel, soda ash, LCM

# Pressure Control Equipment

Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.

2. Safety valves and necessary snbs to fit all drill string in use will be available.



Minimum 2" Choke Line.  
Minimum 2" Kill Line.  
At Least One 2" Minimum Kill Line Valve.

Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.