

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NMSF-078872A</b>
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 <b>N/A</b>
2. Name of Operator <b>XTO Energy Inc.</b>		7. If Unit or CA Agreement, Name and No. <b>N/A</b>
3a. Address <b>2700 Farmington Ave., Bldg. K-1 Farmington, NM 87401</b>	3b. Phone No. (include area code) <b>(505) 324-1090</b>	8. Lease Name and Well No. <b>Bolack 16 #3</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>660' FSL &amp; 660' FEL</b> At proposed prod. zone <b>Same</b>		9. API Well No. <b>30-045- 32068</b>
14. Distance in miles and direction from nearest town or post office* <b>10 air miles S of Bloomfield, New Mexico</b>		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>933'</b>	16. No. of Acres in lease <b>2,401.76</b>	11. Sec., T., R., M., or Blk. and Survey or Area <b>16-27n-11w NMPM</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>1,043'</b>	19. Proposed Depth <b>2,000'</b>	12. County or Parish <b>San Juan</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6,304' ungraded</b>	22. Approximate date work will start* <b>Upon Approval</b>	13. State <b>NM</b>
23. Estimated duration <b>2 weeks</b>		
24. Attachments		

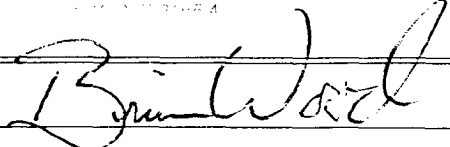
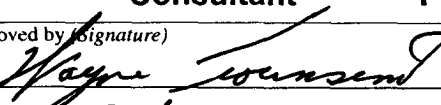
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 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. |

## Comments

\*XTO's Bolack 14 which is in NESE Sec. 16 and is a PC well.

cc: BLM (&amp; OCD), NAPI, Patton, Tribe

25. Signature 	Name (Printed/Typed) <b>Brian Wood</b>	Date <b>12-8-03</b>
Title <b>Consultant</b>	Phone: <b>505 466-8120</b>	FAX: <b>505 466-9682</b>
Approved by (Signature) 	Name (Printed/Typed) <b>Wayne Townsend</b>	Date <b>8/29/05</b>
Title <b>Acting AFM</b>	Office <b>FFO</b>	

Application approval does not warrant or certify the 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.

NMOCD

**DISTRICT #**  
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

## OIL CONSERVATION DIVISION

**2040 South Pacheco  
Santa Fe, NM 87505**

**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 30-045-32068		<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name BASIN FRUITLAND COAL	
<sup>4</sup> Property Code 30312	<sup>5</sup> Property Name BOLACK 16		<sup>6</sup> Well Number 3	
<sup>7</sup> OGRIID No. 167067	<sup>8</sup> Operator Name XTO ENERGY INC.		<sup>9</sup> Elevation 6304'	

### <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
P.	16	27-N	11-W	.	660	SOUTH	660	EAST.	SAN JUAN

## "Bottom Hole Location If Different From Surface

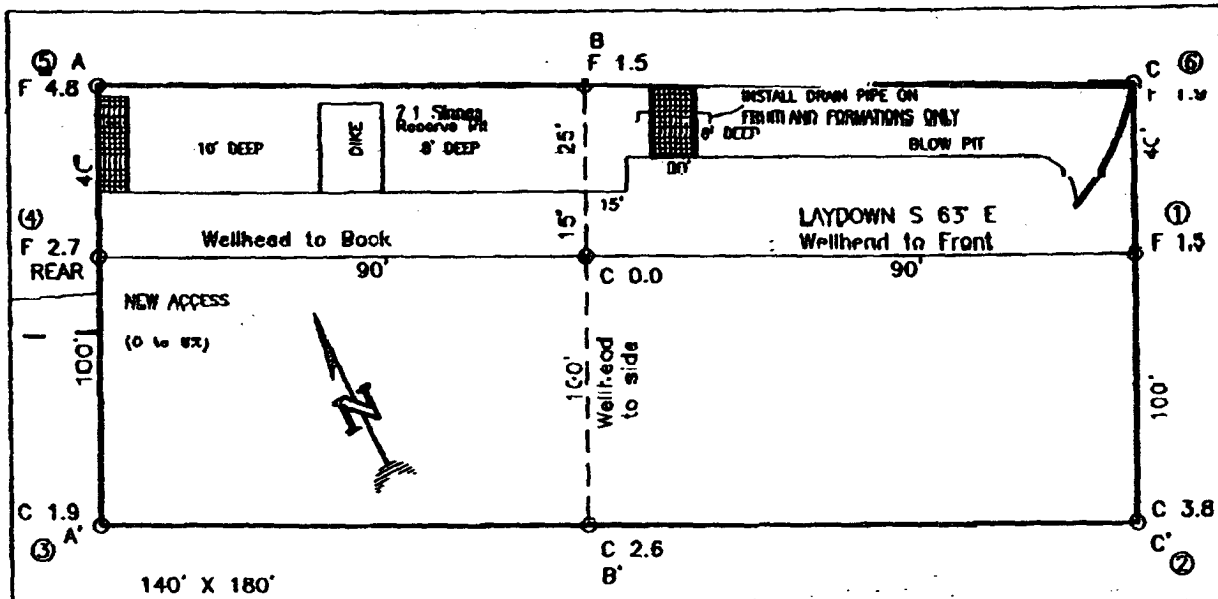
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 320			<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.		

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

16  			SEC. CORNER FD 2 1/2" BC U.S.G.L.O. 1913 BURIED 5' IN SAND HILL	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  <div style="text-align: center;">   <hr/>           Signature  <hr/>           Printed Name    <b>BRIAN WOOD</b>  <hr/>           Title              <b>CONSULTANT</b>  <hr/>           Date                <b>DEC. 8, 2003</b> </div>
16				N 00-01-35 E 5281.53' (M)
SEC. CORNER FD 2 1/2" BC U.S.G.L.O. 1913 BURIED 3' IN FIELD	N 89-59-57 W	LAT: 36°34'11" N. LONG: 108°00'09" W.  CALC. CORNER	660' 	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plot 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.  <div style="text-align: center;">   <hr/>           Date of Survey _____            Signature and Seal of Professional Surveyor:  <div style="text-align: center;"> <b>DAVID A. JOHNSON</b>  <b>NEW MEXICO</b>  <b>REGISTERED PROFESSIONAL SURVEYOR</b>  <b>14827</b> </div> <hr/>           Certificate Number         </div>

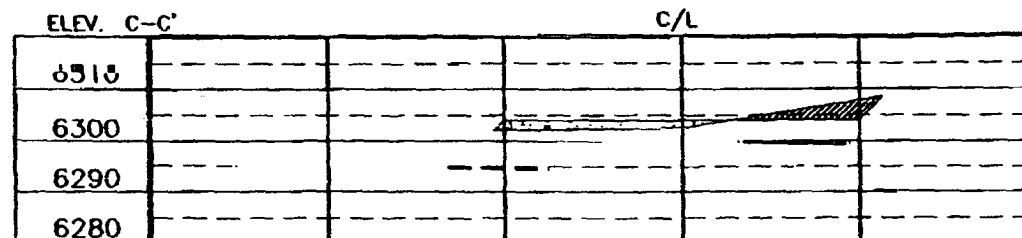
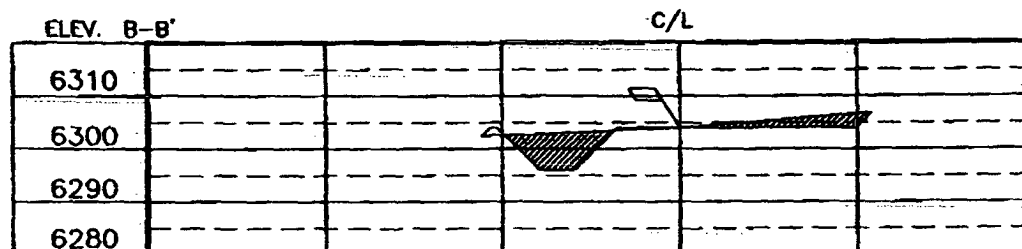
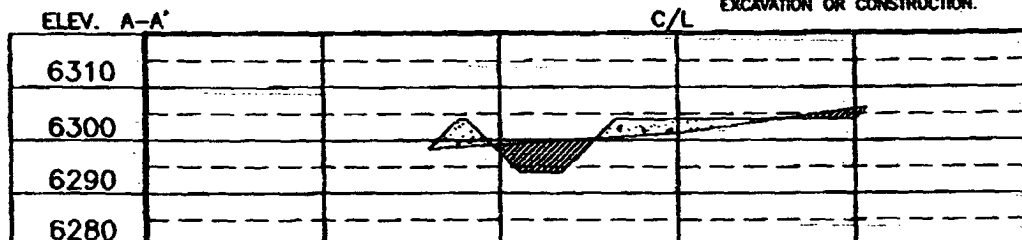
XTO ENERGY INC.  
 BOLACK 16 No. 3, 660' FSL 660' FEL  
 SECTION 16, T27N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 6304', DATE: APRIL 24, 2003

LAT. = 36°34'11" N.  
 LONG. = 108°00'09" W



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.



NOTE: USER 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.

DRAWN BY: B.L. ROW#: CR188 CADFILE: CR188CF8 DATE: 07/10/03

Daggett Enterprises, Inc.  
 Surveying and Oilfield Services  
 P.O. Box 15268 Farmington, NM 87401  
 Phone (505) 326-1772 Fax (505) 326-6019



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS  
Do not use this form for proposals to drill or to re-enter abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.  
NMSF-078872A

6. If Indian, Allottee or Tribe Name  
N/A

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

8. Well Name and No.  
BOLACK 16 #3

9. API Well No.  
30-045-32068

10. Field and Pool, or Exploratory  
BASIN FRUITLAND COAL

11. County or Parish, State  
SAN JUAN COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required following completion of the involved operations. If the operation results in a multiple completion or recompleat testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including re determined that the site is ready for final inspection.)

Will change TD from 2,000 to 2,200 .  
Setting depth of production casing will become 2,200  
Lead cement of production casing will change from 175 sacks to 195 sacks.  
No change in tail cement of production casing.  
Total production casing cement = 457 cubic feet (>100% excess)



cc: BLM (& OCD), Patton, NAPI,

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

BRIAN WOOD

Title CONSULTANT (505) 466-8120

Signature

*Brian Wood*

Date 12/26/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

*Wayne Townsend*

Title Acting AFM

Date 8/29/05

Conditions of approval, if any, are attached. Approval of this notice 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.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willful States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD

XTO Energy Inc.  
Bolack 16 #3  
660' FSL & 660' FEL  
Sec. 16, T. 27 N., R. 11 W.  
San Juan County, New Mexico

PAGE 1

## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Sub sea Elevati</u>
Nacimiento Fm	000'	5'	+6,304'
Ojo Alamo Ss	854'	859'	+5,450'
Kirtland Shale	979'	984'	+5,325'
Fruitland Coal	1,794'	1,799'	+4,510'
Pictured Cliffs Ss	1,999'	2,004'	+4,305'
Total Depth (TD)*	2,000'	2,005'	+4,304'

\* all elevations reflect the ungraded ground level of 6,304'

### 2. NOTABLE ZONES

<u>Gas &amp; Oil Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Ojo Alamo	
	Fruitland	

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 system to be used is not yet known. A typical 2,000 psi stack, manifold, and testing procedures are on Page 3.

XTO Energy Inc.  
Bolack 16 #3  
660' FSL & 660' FEL  
Sec. 16, T. 27 N., R. 11 W.  
San Juan County, New Mexico

PAGE 2

#### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connection</u>	<u>GL Setting Depth</u>
8-3/4"	7"	20	K-55	New	S T & C	160'
6-1/4"	4-1/2"	10.5	K-55	New	S T & C	2,000'

Surface casing will be cemented to the surface with  $\approx 50$  cubic feet ( $\approx 43$  sacks) Class B + 1/4 lb/sk cello-flake + 2%  $\text{CaCl}_2$ . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume:  $\geq 100\%$  excess. A guide shoe and insert float will be used. W. O. C. = 12 hours. Surface casing will be tested to 1,500 psi for 30 minutes.

Production casing will be cemented to the surface. Total cement:  $\geq 417$  cubic feet. Volumes are calculated at  $>100\%$  excess. If cement does not circulate to surface, then a temperature survey will be run to determine the actual cement top as needed. W. O. C. = 12 hours. Test to 2,000 psi.

Lead cement will be  $\approx 175$  sacks Class B light cement (65% cement/35% Poz with 6% gel) with 5 #/sack gilsonite + 1/4 #/sack Flocele. Yield = 1.99 cu ft/sk. Weight = 12.4 #/gal.

Tail cement will be  $\approx 50$  sacks 50/50 Class B Poz with 2% gel + 1/4#/sack Flocele + 0.5% Halad-9. Yield = 1.38 cubic feet/sack. Weight = 13.5 #/gallon.

Cement equipment will include a guide shoe, float collar, and 10 centralizers.

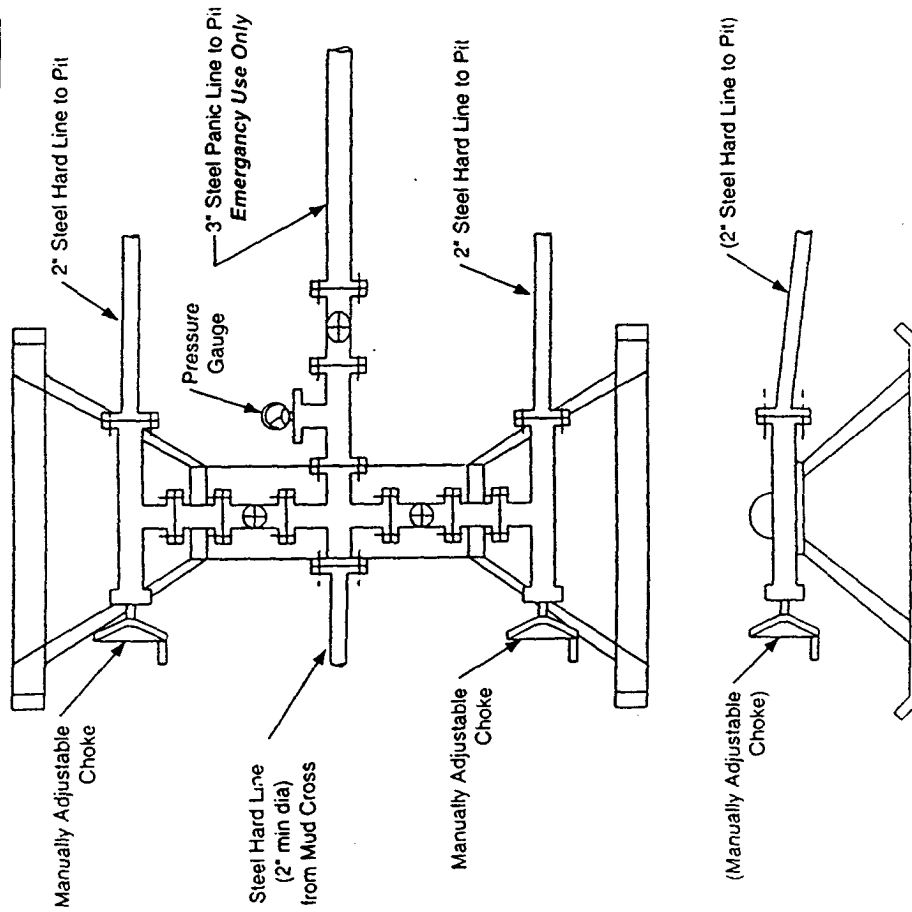
#### 5. MUD PROGRAM

<u>RANGE</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>
0' - 160'	Fresh-Spud	8.4
160' - TD	LSND	8.6

Lost circulation and absorption material will be on location.

# CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

- ## TESTING PROCEDURE
1. Stake all lines from choke manifold to pit.
  2. Pressure test choke manifold after installation.
  3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.



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

2. Pressure test BOP to 200-300 psig (low pressure) for 5 min.
3. Test BOP to Working Pressure or to 70% internal yield of surf csg (10 min).
4. Test operation of (both) rams on every trip.
5. Check and record Accumulator pressure on every tour.
6. Re-pressure test BOP stack after changing out rams.
7. Have Kelly cock valve with handle available.
8. Have safety valve and subs to fit all sizes of drill string.

