

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. SF - 079232	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR <u>Cross Timbers Operating Company</u> <i>XTO Energy</i>			7. UNIT AGREEMENT NAME <i>28096</i>	
3. ADDRESS AND TELEPHONE NO. <u>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401</u>			8. FARM OR LEASE NAME, WELL NO. Bolack "C" #138	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface <u>2170' FNL & 1670' FWL Sec 29, T27N, R08W</u> At proposed prod. zone <u>same</u>			9. API WELL NO. <u>30-045-31154</u>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* <u>Approx 24 air miles south down Largo Canyon from the Blanco NM Post Office</u>			10. FIELD AND POOL, OR WILDCAT Blanco Mesaverde Otero Chacra	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) <u>822' MV / 486' CH</u>			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>F Sec 29, T27N, R08W</u>	
16. NO. OF ACRES IN LEASE <u>320 MV / 160 CH</u>			12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL <u>320 MV / 160 CH</u>			13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. <u>1550'</u>			20. ROTARY OR CABLE TOOLS <u>0'-5,500' w/Rotary Tools</u>	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>6,753' GL</u>			22. APPROX. DATE WORK WILL START* Summer 2002	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8", J-55	24#	320'	200 sx Type III
7-7/8"	4-1/2", J-55	10.5#	5,500'	785 sx Premium Lite cement

This action is subject to technical and
perennial 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".

XTO Energy Inc. plans to drill the above mentioned well as described in the enclosed Surface Use Program.

Please note that this application also includes the El Paso pipeline plat for ROW.

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 <u>JW Patton</u>	TITLE <u>Drilling Engineer</u>	DATE <u>5/6/02</u>
(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:

APPROVED BY /s/ David J. Mankiewicz TITLE _____ DATE JUL 25

*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 department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMCCO

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210

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

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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-31154	² Pool Code 72319	³ Pool Name BLANCO MESAVERDE
⁴ Property Code 28096	⁵ Property Name BOLACK "C"	⁶ Well Number 13B
⁷ GRID No. 167067	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 6753'

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
F	29	27-N	8-W		2170'	NORTH	1670'	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 W/2			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

<p>16</p> <p>WITNESS CORNER FD B.L.M. BC 1955 N 01-53-18 E 26.4' FROM CALC'D CORNER</p> <p>S 89-19-59 E 4984.10' (M)</p> <p>FD B.L.M. BC 1955</p> <p>LAT: 36°32'48" N. LONG: 107°42'30" W.</p> <p>2170'</p> <p>842'</p> <p>822'</p> <p>424'</p> <p>1670'</p> <p>486'</p> <p>29</p> <p>S 01-17-50 E 5312.90' (M)</p> <p>FD B.L.M. BC 1955</p>	<p>17 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>Signature <u>Jeffrey W. Patton</u></p> <p>Printed Name <u>JEFFREY W. PATTON</u></p> <p>Title <u>DRILLING ENGINEER</u></p> <p>Date <u>5-6-02</u></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 belief.</p> <p>Date of Survey <u>8-7-01</u></p> <p>Signature and Seal of Professional Surveyor <u>ROY A. RUSH</u></p> <p>Certificate Number <u>3894</u></p>
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OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-3154	² Pool Code 82329	³ Pool Name OTERO CHACRA
⁴ Property Code 28096	⁵ Property Name BOLACK "C"	⁶ Well Number 13B
⁷ GRID No. 167067	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 6753'

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
F	29	27-N	8-W		2170'	NORTH	1670'	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 160	NW/4			¹³ Joint or Infill	¹⁴ Consolidation Code		¹⁵ Order No.		

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XTO ENERGY INC.

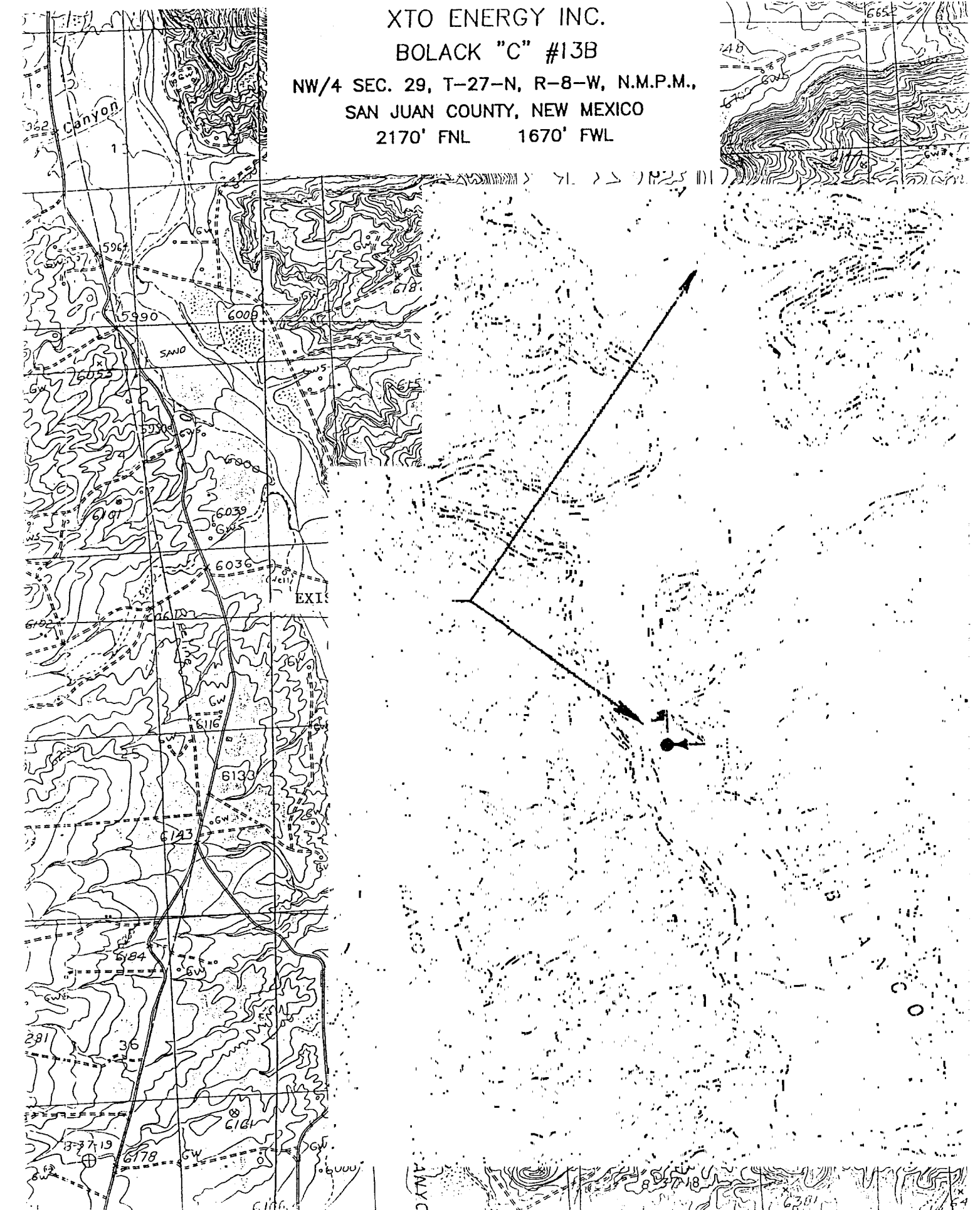
BOLACK "C" #13B

NW/4 SEC. 29, T-27-N, R-8-W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

2170' FNL

1670' FWL



XTO ENERGY INC.

Bolack "C" #13B

APD Data

May 6, 2002

Location: 2170' FNL & 1670' FWL, Sec 29, T27N, R08W

County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: ±5,500'
GR ELEV: 6,753'

OBJECTIVE: Mesaverde/Chacra
Est KB ELEV: 6,765' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 270'	270' to 3,500'	3,500' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND
WEIGHT	8.6-9.0	8.4-8.8	8.6-9.0
VISCOSITY	28-32	28-32	45-60
WATER LOSS	NC	NC	8-10

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pre-treat with 20% LCM @ 3,500'. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity (>85 sec) at TD for logging. Reduce viscosity after logging for cementing purposes.

2. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at ± 320' in 8.8 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-320'	320'	24#	J-55	STC	1370	2950	244	8.097	7.972	7.32	7.95	29.39

Production Casing: 4-1/2" casing to be set at TD in 9.0 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-TD	5,500'	10.5#	J-55	STC	4010	4790	132	4.052	3.875	1.66	1.33	2.44

3. WELLHEAD:

- Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 4-1/2" 8rnd female thread on bottom, 8-5/8" 8rnd thread on top.

4. CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):

A. Surface: 8-5/8", 24#, J-55, STC casing to be set at $\pm 320'$.

Lead: 200 sx of "Type III" cement containing 3% CaCl_2 , ¼ pps celloflake, mixed at 14.5 ppg, 1.39 ft³/sk, & 6.50 gal wtr/sk.

Total slurry volume is 278 ft³, $\pm 100\%$ excess of calculated annular volume to 320'.

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at $\pm 5,500'$. DV Tool to be set @ $\pm 3,850'$.

First Stage

Lead: 80 sx of Premium Lite FM (65/35/6) cement containing 2% KCl, ¼ pps celloflake, 2-4% Phenoseal mixed at 11.9 ppg, 2.39 ft³/sk, 15.60 gal wtr/sx.

Tail: 175 sx of Premium Lite HS (65/35/6) cement containing 2% KCl, 7#/sx CSE, ¼ pps celloflake, 0.5% Fluid loss, 0.2% Dispersant mixed at 12.5 ppg, 2.01 ft³/sk, 10.71 gal wtr/sx..

Second Stage

Lead: 450 sx of Premium Lite FM (65/35/6) cement containing 2% KCl, ¼ pps celloflake, 2-4% Phenoseal mixed at 11.9 ppg, 2.39 ft³/sk, 15.60 gal wtr/sx.

Tail: 80 sx of Premium Lite HS (65/35/6) cement containing 2% KCl, 7#/sx CSE, ¼ pps celloflake, 0.5% Fluid loss, 0.2% Dispersant mixed at 12.5 ppg, 2.01 ft³/sk, 10.71 gal wtr/sx..

Total estimated slurry volume (including 40% excess) for the 4-1/2" production casing is 1,779 ft³.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined for the caliper logs plus 40%. It will be attempted to circ cement to surface on both stages.

5. LOGGING PROGRAM:

A. Mud Logger: There are no plans to use a mud logger at this time.

B. Open Hole Logs as follows: Run Dual Induction/SFL/GR/SP fr/TD ($\pm 5,550'$) to the bottom of the surface csg. Run CNL/LDT (Lithodensity)/GR/Cal and Pe from TD to 3,500'.

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.

