# State of New Mexico Energy, Minerals & Natural Resources

District I 1625 N French Dr., Hobbs, NM 88240 District H 1301 W. Grand Avenue, Artesia, NM 88210 District III

Regulatory Analyst

E-mail Address: sherry pack@xtoentergy.com

02/26/2008

Phone:

432.620.6709

Title:

Date:

Oil Conservation Divsiion 1220 S. St. Francis Dr.

Submit to appropriate District Office

1000 Rio Brazos Rd., Aztec, NM 87410 District IV AMENDED REPORT Santa Fe. NM 87505 1220 S St Francis Dr., Santa Fe, NM 87505 APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE OGRID Number <sup>1</sup>Operator Name and Address 005380 XTO ENERGY. INC. <sup>3</sup> API Number 79701 200 N. Loraine, Ste. 800 Midland, TX 30-025-30538 <sup>4</sup>Property Code <sup>5</sup>Property Name <sup>6</sup>Well No. State Sec 17 Com 301579 10 Proposed Pool 2 9 Proposed Pool 1 a cullon ABO, North (Gas) <sup>7</sup>Surface Location Feet from the North/South Line East/West line Lot Idn Feet from the County UL or lot no Township Range Section **17S** 35E 2034 South 2064 West Lea · Κ 17 <sup>8</sup> Proposed Bottom Hole Location If Different From Surface North/South Line East/West line Feet from the Feet from the County Township Range Lot Idn UL or lot no Section Additional Well Location 13 Cable/Rotary 14 Lease Type Code 15 Ground Level Elevation 12 Well Type Code <sup>11</sup> Work Type Code 3976 G 19 Contractor <sup>20</sup> Spud Date 17 Proposed Depth 18 Formation <sup>16</sup> Multiple 12.120\* Grav Wireline 3/24/1989 Distance from nearest fresh water well Distance from nearest surface water Depth to ground water 55' +1000' +1000' Pit: Liner Synthetic \_ mils thick Clay Pit Volume \_ bbls Drilling Method. Gas/Air Fresh Water Brine Diesel/Oıl-based Closed-Loop System <sup>21</sup>Proposed Casing and Cement Program Casing weight/foot Setting Depth Sacks of Cement Estimated TOC Hole Size Casing Size 17-1/2" 13-3/8" 48# 420' 500 Surface 32# 5000' 1950 Surface 11" 8-5/8" 15.5#,17.0# 4500'-12120' 7-7/8" 5-1/2" 1650 4200 22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present product Describe the blowout prevention program, if any. Use additional sheets if necessary. Well is presently T/A Status. Production zone prior to T/A status: Vacuum; Atoka-Morrow, North FEB 2 7 2008 Proposed Zone: Vacuum: ABO, North \*Plugback depth +/- 9,500 \*\*Formation at TD: Atoka Formation at Plugback depth: ABO Proposed program attached <sup>23</sup> I hereby certify that the information given above is true and complete to the best of **OIL CONSERVATION DIVISION** my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines a general permit , or Approved by: an (attached) alternative OCD-approved plan yerry tack Signature. Printed name: Sherry Pack OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval DMAR

Attached

Conditions of Approval.

0 6 200g

Expiration Date:

District I

District III

State of New Mexico Energy, Minerals & Natural Resources

Form C-102 Revised October 12, 2005

1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

<sup>5</sup> Property Name

State Sec 17 Com

<sup>8</sup> Operator Name

XTO Energy, Inc.

<sup>2</sup> Pool Code 4 760

86800

Submit to Appropriate District Office State Lease - 4 Copies

3 Pool Name Abe North

Vacuum; Atoka Morrow, North (GAS)

Fee Lease - 3 Copies

<sup>6</sup> Well Number

#3

<sup>9</sup> Elevation

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

<sup>1</sup> API Number

30-025-30538

<sup>4</sup> Property Code 30 15 7 9

<sup>7</sup>OGRID No.

005380

AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>10</sup> Surface Location											
UL or lot no	Section	Township	Range	Lot. Idn	Feet from		North/South line	Feet from the	East/West line	County	
K	17	17S	35E		2034		South	2064	West	Lea	
11 Bottom Hole Location If Different From Surface											
UL or lot no	Section	Township	Range	Lot. Idn	Feet from		North/South line	Feet from the	East/West line	County	
		•								,	
12 Dedicated Acr	12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.										
320-80											
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A											
1101220111	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										IFICATION	
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								complete to the be	est of my knowledge o	and belief, and that this	
								*		terest or unleased mineral	
								II		osed bottom hole location	
								ll.		ocation pursuant to a ral or working interest, or	
								11		compulsory pooling order	
								heretofore entered		pooms or acc	
								Sheu	extack	02/26/08_	
								Signature	0	Date	
								Sherry Pa	ack		
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**ELEVATION:** 

PBTD - 12110'

KB - 3993'

TD - 12120'

GL - 3976'

WELL DATA:

Surface Casing:

13-3/8", 48 ppf, H-40. Set at 420'. Cemented with 500 sx.

Circulated.

Inter. Casing:

8-5/8", 32 ppf, K-55. Set at 5000'. Cemented with

1950 sx. Circulated

Prod. Liner:

5-1/2", 15.5 # & 17# K-55 & L-80 liner. Set at 12120'.

Cemented with 1650 sx. TOL at 4500'.

PERFORATIONS:

Atoka: 11974'-12010' (148 total holes, 37 net ft)

**OBJECTIVE:** 

Abandon Pressure Depleted Atoka & Recomplete well to Abo intervals

# **RECOMMENDED PROCEDURE**

- 1. RU PU.
- 2. ND WH & NU BOP. Release Packer @ 11857'. POH w/ packer, 2 3/8" XL on/off tool w/ 1.87" F profile & 2 7/8" 6.5# L-80 production tbg. Since the production tbg has been in the well since initial completion in May 1989, scan the production tbg as it is pulled out of the well. If condition of tbg merits, will use the production tbg again.
- 3. RU Gray WL. RIH w/ CIBP to abandon the Atoka perfs from 11974'-12010'. Set CIBP @ +/-11900'. RIH w/ dump bailer and dump 5 sx cement on top of CIBP. POH w/ WL.
- 4. RIH w/ WL & run Gamma Ray Correlation Log from 10000' up to 7500'. Tie correlation log into Schlumberger Compensated Neutron-Litho Density log ran on 5/1/1989. POH w/ WL.

#### LOWER ABO COMPLETION

- 5. RIH w/ casing guns loaded 2 SPF. Perf Abo interval from 9490'-9506' (16' ft, 32 total holes). RD Gray WL after perforating
- 6. PU & Rack 2 7/8" WS.
- 7. TIH w/ packer & 2 7/8" WS. Set packer +/- 9400'.
- 8. RU Pumping Services.



#### **ACID BREAKDOWN**

Pump 3000 gal (71 bbls) 20% HCL & 60 Ball Sealers @ 6 BPM. Maximum pressure should be 5000 psi. Drop ball sealers in groups of 10 every 9 bbls throughout last ¾ of acid job. If ballout occurs, surge ball sealers off and continue with acid job. After acid is pumped, flush to bottom perf with fresh water. RD Pumping Services.

- 9. Leave well SI for a minimum of 2 hours to allow acid to spend. Flow well back until well dies.
- 10. After well is dead, RU swab and swab interval to determine productivity & oil cut of interval. If satisfactory then proceed with further stimulation. If unsatisfactory then POH w/ packer & WS and proceed with procedure to test the Upper ABO completion (Step # 16)
- 11. RU Pumping Services

## **ULTRAGEL STIMULATION**

Pump 6000 gal (143 bbls) 20% Ultragel @ 8 BPM. Maximum pressure should be 5000 psi. Flush to bottom perf with fresh water. Overflush with 30 bbls fresh water. Shut down and obtain 5, 10, 15 min SI pressures. RD Pumping Services.

- 12. Leave well SI for a minimum of 4 hours to allow Ultragel to spend.
- 13. Flow well back until well dies.
- 14. Swab interval to assist in well cleanup and to further help in determining zone productivity.
- 15. Release packer & POH w/ packer &WS.
- 16. RU Gray WL and set RBP w/ ball catcher (CIBP if not productive) @ +/- 9400' to isolate Lower ABO Interval. POH w/ WL.



## **UPPER ABO COMPLETION**

17. RIH w/ casing guns loaded 2 SPF. Perf following Abo intervals.

I) 8825'-8840'	15'	30 total holes
II) 8854'-8865'	11'	22 total holes
Totals	26'	52 total holes

RD Gray WL after perforating

- 18. TIH w/ packer & WS. Set packer @ +/- 8700'.
- 19. RU Cudd Pumping Services.

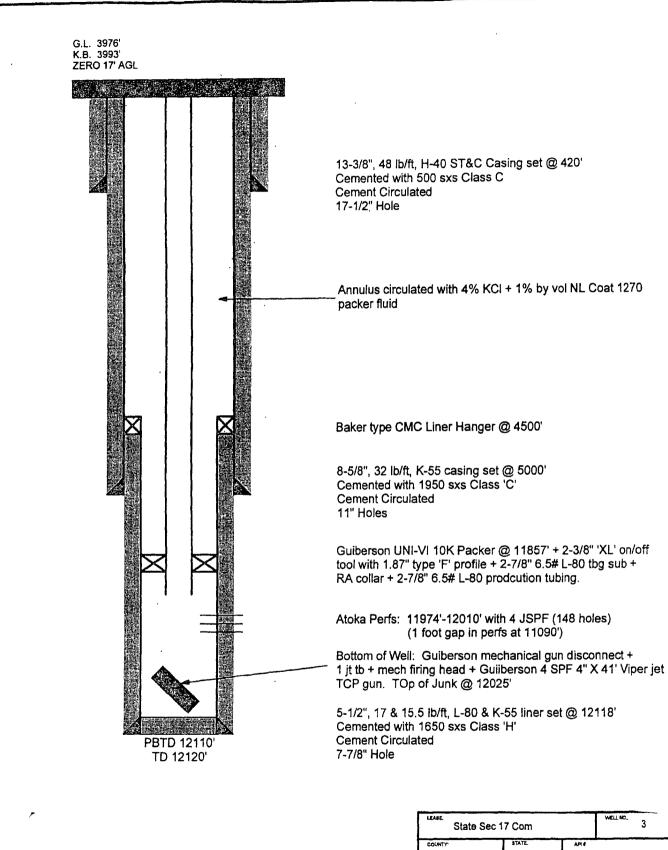
#### **ACID BREAKDOWN**

Pump 5000 gal (119 bbls) 20% HCL & 100 Ball Sealers @ 6 BPM. Maximum pressure should be 5000 psi. Drop ball sealers in groups of 10 every 10 bbls throughout last ¾ of acid job. If ballout occurs, surge ball sealers off and continue with acid job. After acid is pumped, flush to bottom perf with fresh water. Surge well after breakdown to ensure all ball sealers are off of perforations.

### **ULTRAGEL STIMULATION**

Pump 8000 gal (190 bbls) 20% Ultragel @ 8 BPM. Maximum pressure should be 5000 psi. Flush to bottom perf with fresh water. Overflush with 30 bbls fresh water. Shut down and obtain 5, 10, 15 min SI pressures. RD Cudd Pumping Services.

- 20. Leave well SI for a minimum of 2 hours to allow acid to spend. Flow well back until well dies
- 21. Release packer & TOH w/ WS & packer.
- 22. **ONLY IF Lower ABO is productive.** TIH w/ WS to RBP. Latch onto & release RBP. POH w/ WS, packer & RBP. Laydown WS.
- 23. TIH w/ 2 7/8" prod tbg. ND BOP. NU WH. TIH w/ rods & pump. RD PU. POP.



State Sec 1	WELL NO.				
countr Lea	STATE. NM		API #	30-025-30538	
2065' FWL & 2034' FSL Sect 17 T17S R34E					
C. M. Jon	DATE	16 De	ecember 1994		