FORM APPROVED Form 3160-3 SUBMIT IN TRIPLICATE\* OMB NO. 1004-0136 (July 1992) UNITED STATES (Other instructions on Expires: February 28, 1995 reverse side) DEPARTMENT OF THE INTERIOR 5. LEASE DESIGNATION AND SERIAL NO. 14-20-604-62 Tribal A **BUREAU OF LAND MANAGEMENT** 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL Ute Mountain Ute Tribe OR DEEPEN 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DRILL X DEEPEN 27645 b. TYPE OF WELL GAS X OUUMULTIPLE 8. FARM OR LEASE NAME, WELL NO. WEI Ute Indians A 2. NAME OF OPERATOR #35 XTO Energy Inc. 9. API WELL NO. 3. ADDRESS AND TELEPHONE NO. 2700 Farmington Ave., Bldg. K. Ste 1 Farmington. 87401 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) Ute Dome Paradox 985' FNL & 2470' FWL Sec 36. T32N. 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA At proposed prod. zone Sec 36, Durango Colorado T32N **R14W** 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 12. COUNTY OR PARISH 13. STATE Approx 10 mile NW of the La Plata, NM Post Office San Juan NM 15. DISTANCE FROM PROPOSED\* 16. NO. OF ACRES IN LEASE NO. OF ACRES ASSIGNED TO THIS WELL LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any) 985 4,852,49 691.18 Sec. 36. 18. DISTANCE FROM PROPOSED LOCATION\* 19. PROPOSED DEPTH TO NEAREST WELL, DRILLING, COMPLETED, 20. ROTARY OR CABLE TOOLS OR APPLIED FOR, ON THIS LEASE, FT. 8.825' Rotary 21. ELEVATIONS (Show whether DF,RT, GR, etc.) 22. APPROX. DATE WORK WILL START 6.272' Ground Level Winter 2002 23. PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE RADE, SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH QUANTITY OF CEMENT 12/-1/4" 8-5/8" J-55 24.0# 850' 360 sx Type III 5-1/2" J-55 7-7/8" 17.0# 8.825' 680 sx in two stages Venting / Flaring approved for 30 days DEF NTL-4A Set 8-5/8", 24.0#, J-55 STC surface csg @ 850'. Cmt w/approx 220 sx Type III cmt w/additives followed by 100 sx Type III cement w/additives. Attempt to circ cmt to surface. Install & test BOP equipment as required. Drill 7-7/8" hole to approx 8,825'. Set 5-1/2", 17.0#, J-55, LTC production csg @ 8,825' TVD. Cmt first stage w/approx 410 sx Class H cmt w/additives. TOC designed for 6,000'. Cmt second stg w/170 sx Liteweight cmt w/additives followed by 100 sx Class B cmt w/additives. Final Cement Volumes 30% excess. Attempt to circ cmt to surface (second stg). Approval of this agreement does not warrant or certify that the followed by 100 sx Class B cmt w/additives. Final cement volumes will be otained fr/caliper log + warrant or certify that the operator IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposalis to deepen, give dataon present productive to the proposed level of the deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Green the proposed level of the subject lease which are committed to the subject lease. thereof and other holders operator rights hold Lawrenosednew productions of the post of th which are committed hereto... Drilling Engineer SIGNED (This space for Federal or State office use)

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

TITLE

hose rights in the subject lease which would entitle th

ne applicant to conduct operations there APPROVED FOR A PERIOR

MAR 2 1 2003

PERMIT NO.

APPROVED BY

Application approval does not wa

CONDITIONS OF APPROVAL, IF ANY:

DISTRICT | 1625 N. French Dr., Hobbs, H.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

ION

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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

8894

Certificate Nu

☐ AMENDED REPORT

1000 Rio Brazos Rd., Aziec, N.M. 87410
DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

	WELL LOCATION AND	D ACREAGE DEDICATION F	PLAT
30-045-316	2001 Code 76760	UTE DOME	PARADOX
4Property Code 22645		roperty Name ITE INDIANS A	Well Number 35
*OGRID No. (67067	•	perator Name ENERGY INC.	Elevation 6272'
·	<sup>10</sup> Sui	rface Location	

11 Bottom Hole		Different Fro	m Surface		· .
Poppe I del Ide					
rouge Lot lot	Feet from the	North/South fine	Feet from the	East/West line	County
Joint or Infill	<sup>14</sup> Consolidation Co	de	<sup>15</sup> Order No.		
3	Joint or Infill	loint or Infill 1º Consolidation Co	Joint or Infill 16 Consolidation Code	loint or Infill 16 Consolidation Code 18 Order No.	Joint or Infill 16 Consolidation Code 18 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 CALC'D CORNER S 89-59-44 E FROM 2636.06' SEC. CORNER FROM W.C. CORNER ED ALUM CAP **OPERATOR CERTIFICATION** BCM 1986 FD ALUM CAP BLM 1986 I hereby certify that the information contained herein is true and complete to the best of my knowledge and 2470 166 1152 ₹ Signature LAT: 36'56'56" N LQNG: 108'15'39" W JEFFREY W PATION **Printed Name** IDRILLING ENHINEER ഗ Title 7-10-02 Date 36 QTR. CORNER FD ALUM CAP BLM 1988 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by Date of Su रहाजार

Form 3160-5 (November 1994)

# **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

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

5. Lease Serial No.

14-20-604-62 TRIBAL A

DEC 1 3 2002 SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an of Land Managem abandoned well. Use Form 3160-3 (APD) for such proposals to drill or to re-enter an of Land Managem abandoned well. 6. If Indian, Allottee or Tribe Name TUTE MTN UTE TRIBE 7. If Unit or CA/Agreement, Name and/or No SUBMIT IN TRIPLICATE - Other instructions on reverse side 1. Type of Well Oil Well 8. Well Name and No. UTE INDIANS A #35 2. Name of Operator XTO Energy Inc. 9. API Well No. 3a. Address 3b. PhoneNo. (include area code) 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401505-324-1090 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) UTE DOME PARADOX 985' FNL & 2470' FWL UL C SEC 36. T32N. R14W 11. County or Parish, State NM san Juan CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHERDATA 12. TYPE OF SUBMISSION TYPE OF ACTION X Notice of Intent Production (Start/Resume) Water Shut-Off Acidize Deepen Well Integrity Alter Casing Fracture Treat Reclamation Subsequent Report Casing Repair New Construction Recomplete Other Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal Describe Proposed or CoommpletedOperation (clearly state all pertinent details, including estimated starting date of any proposed work and approximateduration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final AbandonmentNotices shall be filed only after all requirements, including reclamation, have been completed, and the operator has 13. determined that the final site is ready for final inspection.) XTO Energy Inc. has modified the casing design that was originally proposed in the APD for the above mentioned well. Please replace the original proposed drilling procedure with the revised procedure attached. 14. I hereby certify that the foregoing is Name(Printed/Typed) Title JEFF PATTON DRILLING ENGINEER 12/11/02 Date THIS SPACE FOR FEDERAL OR STATE OFFICE USE Approved by Acting Field Office Meneo 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, makes it a crime for any person knowingly and willfully to make to any departmentor agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# **XTO ENERGY INC.**

# Ute Indians A #35 Proposed Drilling Procedure December 10, 2002

Surface Location: 985' FNL & 2470' FWL, Sec 36, T32N, R14W County: San Juan State: New Mexico

PROJECTED TOTAL VERTICAL DEPTH: ±8,825'

GR ELEV: 6,071'

OBJECTIVE: <u>Ute Dome Paradox</u> EST KB ELEV: 6,083' (12' AGL)

# 1. GENERALIZED DRILLING PROCEDURE:

- A. MIRT. Drill a 12-1/4" hole to ±850', run and cement 8-5/8", 24.0#, J-55, STC casing. Circulate cement to surface.
- B. NU wellhead and BOP equipment. Test stack, wellhead, choke manifold and casing to 250/1,000 psig.
- C. Drill an 7-7/8" hole to approximately TD (±8,825'). Note: Due to geological structure it is possible that directional drilling tools (mud motor with MWD) may be required to maintain a straight (vertical) hole.
- D. Log well as prescribed by geological department.
- E. Run 5-1/2", 17.00#, J-55, LT&C production casing. Set DV tool just below the Morrison Formation. Attempt to cement the first stage from TD to  $\pm 6,000$ '. Attempt to cement the second stage from the DV tool to surface. RDRT and prepare well for completion.

#### 2. MUD PROGRAM:

INTERVAL	0' to 850'	850' to 8,000'	8,000' to TD	Logging @ TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"	7-7/8"
MUD TYPE	FW/Gel/Lime	FW/Polymer/LCM	LSND	LSND
WEIGHT	8.6-9.0	8.4-8.8	8.8-9.0	8.8-9.0
VISCOSITY	28-32	28-32	42-60	100-120
WATER LOSS	NC	NC	8-10	8-10

Remarks: Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

## 3. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at  $\pm 850$ ' in  $\pm 8.8$  ppg mud.

	<u>-</u>			<u> </u>	Coll	Burst						
					L		TA CAL	ID	Drift	SF	SF	SF
1					Rating	Rating	Jt Str	ш.	Dim	or	Or .	Or.
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-850'	850'	24.0#	J-55	STC	1370	2950	244	8.097	7.972	3.44	4.62	12.0

Optimum makeup torque for 24.0#, J-55, STC casing is 2,440 ft-lbs (Min - 1,830 ft-lbs, Max - 3,050 ft-lbs).

Production Casing: 5-1/2" casing to be set at TD in  $\pm 9.0$  ppg mud.

				•	Coll	Burst						
		1			Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-TD	8,825'	17.0#	J-55	LTC	4910	5320	247	4.982	4.767	1.19	2.12	1.64

Optimum makeup torque for 17.0#, J-55, LT&C casing is 2,470 ft-lbs (Min – 1,850 ft-lbs, Max – 3,090 ft-lbs).

#### 4. WELLHEAD:

- A. 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.
- B. Tubing Head: Larkin Fig 612 (or equivalent), 3,000 psig WP (6,000 psig test) with 4-1/2" ID (designed to slip over 4-1/2" OD) weld-on, slip-on body and 7-1/16" (3,000 psig WP) flange on top.

### 5. CEMENT PROGRAM:

A. Surface:

8-5/8", 24.0#, J-55, STC casing to be set at  $\pm$  850'.

<u>Lead:</u> 260 sx of Type III (equivalent to Class "C") cement containing 8% gel, 2% CaCl<sub>2</sub>, ¼ pps celloflake, mixed at 12.5 ppg, 2.19 ft<sup>3</sup>/sk, & 12.40 gal wtr/sk.

<u>Tail:</u> 100 sx of Type III (equivalent to Class "C") cement containing 2% CaCl2, 1/4 pps celloflake mixed at 14.5 ppg, 1.40 cuft/sx & 6.5 gals wtr/sx.

Total slurry volume is 710 ft<sup>3</sup>,  $\pm$ 100% excess of calculated annular volume to 850'.

B. <u>Production:</u> 5-1/2", 17.0#, J-55, LT&C casing to be set at ±8,825' MD. DV Tool Set @ 3,000'.

#### First Stage:

<u>Lead:</u> 410\* sx of Class "H" cement containing 6% gel, ¼ pps celloflake, 0.5% fluid loss, 0.25% dispersant & 2% Phenoseal (LCM), mixed at 14.1 ppg, 1.55 ft<sup>3</sup>/sk, 7.88 gal wtr/sk.

#### **Second Stage:**

<u>Lead:</u> 170\* sx of Class "B" cement containing 2% extender, 1/4 pps celloflake & 2% CaCl2 mixed at 11.4 ppg, 2.82 cuft/sx & 17.5 gal wtr/sx.

Tail: 100\* sx of Class "B" cement containing 2% extender, 1/4 pps celloflake & 2% CaCl2 mixed at 12.5 ppg, 2.06 cuft/sx & 11.8 gal wtr/sx.

Total estimated slurry volume for the 4-1/2" production casing is 1,321 ft3.

- \* This volume includes 30% excess over the gauge hole volume. Actual cement volume will be based on log caliper volume plus 30% excess to circulate cement to the surface.
- Note: The slurry mixture may change slightly based upon final design, but our plan is to circulate cement to surface from TD.

#### 6. DRILLING HAZARDS:

- A. Deviation should be watched carefully from below surface casing. Due to geological structure it is possible that directional drilling tools may be required to maintain a straight (vertical) hole.
- B. Hydrogen Sulfide Gas (H<sub>2</sub>S) could be encountered at this depth (±7,675'), since the Paradox formation will be penetrated.
- C. Seepage and/or lost circulation could be encountered below surface casing, though there is no indication that the problem should be severe.

## 7. **LOGGING PROGRAM:**

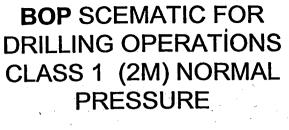
- A. Mud Logger: A mud logger will be brought on between 6000'-8,825'. The mud logger will remain on the hole until TD.
- B. Open Hole Logs as follows (logging company to be determined):
   Dual Induction/SFL/GR/Cal from TD (±8,825') to bottom of surface casing.
   CNL/LDT/GR/Cal/Pe from TD (±8,825) to 1,200'.
   FMI log from 8,600'-7,750' (approx. Actual depth and interval will be determined from logs).

8. <u>FORMATION TOPS (estimated):</u> (Note: Formation tops are *estimated*. Due to complex geological structure (faulting), formation tops will be determined from actual well logs. Actual formation tops will be reported on the completion report.)

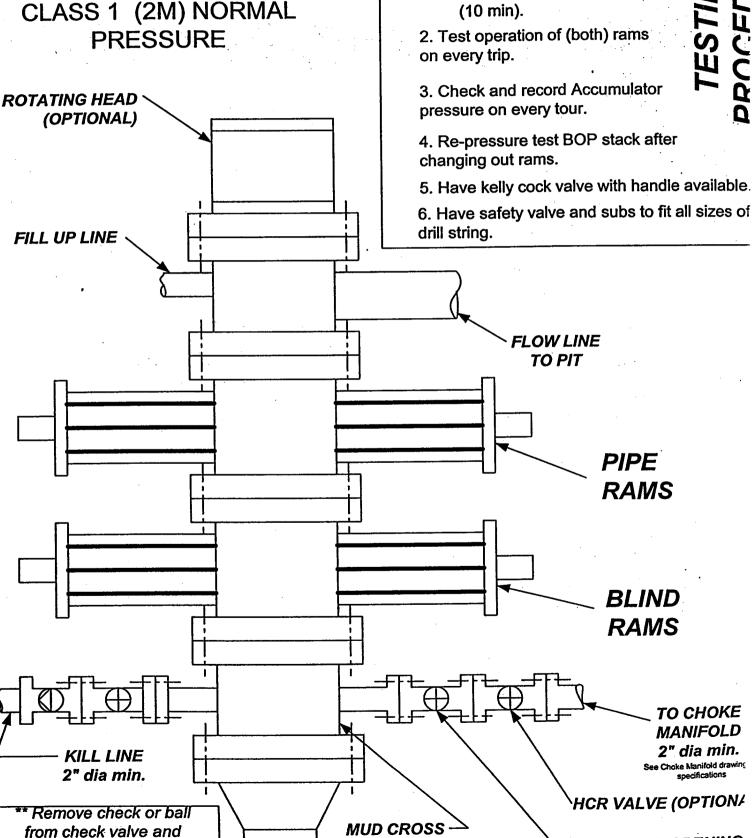
<b>Formation</b>	Sub Surface Depth	Well Depth (TVD)		
Gallup SS	4581'	1706'		
Greenhorn LS	3886'	2401'		
Graneros Shale	3834'	2453'		
First Dakota SS	3781'	2506'		
Burro Canyon SS	3579'	2708'		
Morrison SS	3534'	2753'		
Junction Creek	2994'	3,293'		
Summerville	2617'	3670'		
Todilito	2531'	3756'		
Entrada SS	2517'	3770'		
Carmel Formation	2391'	3896'		
Wingate SS	2357'	3930'		
Chinle Formation	2046'	4241'		
Shinarump Congl	1411'	4876'		
Moenkopi Formation	1271'	5016'		
Cutler Group	1046'	5241'		
Hermosa Group	-553'	6840'		
Paradox Formatiom	-1387'	7674'		
Ismay Member*	-1542'	7829'		
Desert Creek Member*	-1721'	8008'		
Akah Member*	-1831'	8118'		
Baker Creek Member*	-2037'	8324'		
Alkali Gulch Member	-2285'	8572'		
Projected TD	-2538'	8825'		

<sup>\*</sup> Available pressure data from the off-set wells indicate that the BHP should ±2,500 psig.

2" (MIN) FULL OPENING



press test to same press



1. Test BOP after installation:

psig (low pressure) for 5 min.