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February 8, 1999

FEB - 8 1999

**Hand Delivered**


David Catanach  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Re: Case No. 12100; Application of Cross Timbers Oil Company  
for a non-standard subsurface gas well location/producing  
area and for simultaneous dedication, San Juan County,  
New Mexico (Ute Indians "A" Well No. 26)

Dear David:

Enclosed is a copy of Cross Timbers' directional drilling request.

Very truly yours,

  
James Bruce

Attorney for Cross  
Timbers Oil Company

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau 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 an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. Ute 14-20-604-62
2. Name of Operator Cross Timbers Operating Company		6. If Indian, Allottee or Tribe Name Ute Mountain Ute Indian Tribe
3a. Address 2700 Farmington Ave., Bldg K Suite 1, Farmington, NM 87401	3b. Phone No. (include area code) 915/682-8873	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Surface Location: 570' FSL & 1045' FEL, Sec. 2, T31N, R14W Bottom Hole Location: 850' FSL & 1450' FEL, Sec. 2, T31N, R14W		8. Well Name and No. Ute Indians A #26
		9. API Well No.
		10. Field and Pool, or Exploratory Area Ute Dome Paradox
		11. County or Parish, State San Juan Co. 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 checked="" type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Directionally drill
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	to BHL.

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat 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 recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

The original APD, Form 3160-5, filed on December 15, 1998 needs to have the following items changed:

Total Depth	ORIGINAL 8800'	REVISED 8900' MD, 8800' TVD
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14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Mark A. Gosch	Title Drilling Engineer
Date 2/01/99	

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
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.	Office	

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.

# CROSS TIMBERS OPERATING COMPANY

Ute Indians A #26

Drilling Procedure

January 29, 1999

Surface Location: 570' FSL & 1045' FEL, Sec 2, T31N, R14W

Bottomhole Location: 850' FSL & 1450' FEL, Sec 2, T31N, R14W

County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 8,800' TVD OBJECTIVE: Paradox GL ELEV: 6,082'

**DRILLING SUMMARY:** Drill a 12-1/4" hole to approximately 850' and set 8-5/8" casing and cement. After drilling out the surface casing shoe, the hole will be directionally drilled to hit a target of 850' FSL & 1450' FEL from the section lines and then return to vertical by a depth of 2300' TVD. Vertical drilling will continue to TD (8800' TVD). A 4-1/2" string of casing will be run to TD and cemented in two (2) stages with a DV Tool set at approximately 3000' TVD.

## 1. 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	Native	FW/Polymer	LSND	LSND
WEIGHT	8.6-9.0	8.4-9.0	8.8-9.0	8.8-9.0
VISCOSITY	28-32	28-32	42-46	70-90
WATER LOSS	NC	NC	8 - 10	8 - 10

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Use of LCM may be necessary to control seepage prior to mud-up point. Reduce viscosity after logging for cementing purposes.

## 2. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at  $\pm$  850' in 8.6 ppg mud (\$7.25/ft).

Interval	Length	Weight	Grade	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	Drift (in)	SF Coll	SF Burst	SF Tension
0'-850'	850'	24#	J-55	STC	1,370	2,950	244	7.972	9.19	14.60	31.28

Optimum makeup torque for 24#, J-55, STC casing is **2,440 ft-lbs** (Min - 1,830 ft-lbs, Max - 3,050 ft-lbs).

Production Casing: 4-1/2" casing to be set at TD in 9.0 ppg mud (\$3.60/ft)

Interval	Length	Weight	Grade	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	Drift (in)	SF Coll	SF Burst	SF Tension
0'-TD	8,900'	11.6#	N-80	LTC	6,350	7,780	223	3.875	1.54	1.89	2.21

Optimum makeup torque for 11.6#, N-80, LTC casing is **2,280 ft-lbs** (Min - 1710 ft-lbs, Max - 2,850 ft-lbs).

3. WELLHEAD:

Casinghead      Larkin Fig 92 (or equivalent) 4,000 psig test (2,000 psig WP) 8-5/8" 8rd pin on bottom and 2,000 psig WP 10-3/4" API Modified 8rd thread on top (\$650).

Tubinghead      Larkin Model 612, 3000 psig WP, 4-1/2", 8rd box on bottom and 7-1/16", 3000 psig WP, flanged top, with a 4-1/2" bell nipple.

4. CEMENT PROGRAM:

- A.      Surface      8-5/8", 24#, J-55, STC casing at 850'.
- Lead:      260 sx of 35:65 Pozmix/Class "H" cement w/ 8% Gel, 6 pps Gilsonite, & 1/4 pps Celloflake (11.8 ppg, 2.26 cu.ft./sx, 12.32 gal/sx wtr.).
- Tail:      100 sx Class "H" cement w/ 2 % CaCl (15.6 ppg, 1.20 cu.ft./sx, & 5.25 gal/sx wtr.).
- C.      Production      4-1/2", 11.6#, N-80, LTC casing at 8,800' TVD, w/ DVT @ **3,000'TVD**
- First Stage:      Lead - 700 sx of Class "H" cement w/ 0.6% FL-52 (15.6 ppg, 1.18 cu.ft./sx, & 5.21 gal/sx wtr.) Estimate TOC @ +/- 6000'TVD.
- Second Stage:      Lead - 350 sx of 35:65 Pozmix/Class "H" cement w/ 8% Gel, 6 pps Gilsonite and 1/4 pps Celloflake (11.8 ppg, 2.26 cu.ft./sx, & 12.32 gal/sx wtr.).
- Tail - 150 sx of Class "H" cement (15.6 ppg, 1.18 cu.ft./sx, & 5.23 gal/sx wtr.). Top of tail slurry to be +/-2500' TVD.

Remarks: Use 20% excess over volume calculated from open hole logs to bring cement to +/-6000' TVD on the first stage and to the surface on the second stage.

5. DRILLING HAZARDS:

H2S or other Poisonous Gases - Hydrogen sulfide has been present in most wells drilled in this area and is anticipated in this well below surface casing.

Abnormal Pressures - No overpressured zones are known to exist in this area.

Lost Circulation - Lost circulation is anticipated below approximately 5000' and can be controlled with conventional lost circulation materials added to the mud system while drilling the well. This is not known to be a significant problem to drilling in this area.

6. LOGGING PROGRAM:

Mud Logger      Two man logging unit, on at 2,000'.  
                          Catch 10' samples from 2,800' to 3,800' TVD.  
                          Catch 30' samples from 3,800' to 6,400' TVD.  
                          Catch 10' samples from 6,400' to 8,800' TVD.  
                          Send 1 set of dry samples to CTOC in Ft. Worth.

Open Hole      Resistivity  
                          Array Induction/GR/SP/Cal      Bottom of Surface Casing to TD.  
                          Porosity  
                               Compensated Neutron-Lithodensity/GR/Cal/Pe      2,200' – 3,000' TVD  
                                    6,500' – 8,800' TVD

                         Other  
                               FMI      6,500' – 8,800' TVD

7. FORMATION TOPS:

Formation	Subsea Depth	Well Depth TVD
Mancos Shale	+5500'	596'
Gallup	+4450'	1646'
Greenhorn Shale	+3866	2233'
Grancros Shale	+3803'	2293'
Dakota Ss	+3740'	2356'
Burro Canyon Ss	+3550'	2546'
Morrison Ss	+3480'	2616'
Entrada Ss	+2600'	3496'
Chinle	+2150'	3946'
Permian, Cutler	+1215'	4881'
Pennsylvanian, Hermosa	-437'	6533'
Paradox Formation	-1472'	7568'
Ismay	-1646'	7742'
Desert Creek	-1780'	7876'
Akah	-1976'	8072'
Barker Creek	-2129'	8225'
Lower Barker Creek	-2198'	8294'
Alkalai Gulch	-2470'	8566'
Molas	-2704'	8800'
TD	-2704'	8800'

8. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Gary Burch	Project Geologist	817-882-7273	817-572-4431
Barry Voigt	Reservoir Engineer	817-870-8462	817-540-2092
Mark Gosch	Drilling Engineer	915-682-8873	915-689-4338
Bobby Smith	Operations Manager	915-682-8873	915-689-8839
Boogie Armes	Drilling Supervisor	505-320-8435 local cellular 915-556-7403 cellular	806-894-8073
Don Read	Drilling Consultant	505-320-8435 local cellular 505-760-9013 cellular	505-276-8530

9. SPECIAL INSTRUCTIONS:

- A. Daily drilling reports should be called in to the Midland office at (915) 682-8873 or faxed to (915) 687-0862 by 8:00 a.m. Reports should be based upon the CTOC Daily Drilling Report form, as well as the Casing and Cementing Detail Form provided by CTOC.
- B. Deviation in Surface Hole: Maximum of 1° and not more than 1° change per 100'.  
Deviation in Production hole:  
Above 2300' TVD: Follow the planned inclination and azimuth changes as specified in the directional profile plan.  
Below 2300' TVD: Maximum of 4° and not more than 1° change per 100'.  
**Note: Maximum distance between surveys is 500'.**
- C. Drill out of surface casing after WOC 12 hours. Drill cement and guide shoe with minimum weight and RPM, TOOH, pick up directional BHA, TIH and continue drilling as per directional drilling plan. Keep location clean and water used to a minimum.
- D. Check BOP blind rams each trip and pipe rams each day. Strap pipe on last bit trip prior to reaching TD.
- E. A trash trailer will be on provided on each location. Keep trash picked up and the location as clean as possible. All drilling line, oil filters, etc. should be hauled away at the Drilling Contractors expense. At the conclusion of the drilling operations, the contents of the trash trailer will be disposed of into a commercial sanitary landfill.
- F. The reserve pits will be lined with a 12 mil plastic liner in order to contain the drill cuttings and drilling fluids. At the conclusion of the drilling operations, if necessary, the free water in the reserve pits can be hauled away to a commercial disposal well and then the contents of the reserve pit will be buried in place and the pit covered with the original topsoil as much as possible.

Mark A. Gosch  
1/29/99



# CROSS TIMBERS OPERATING CO.

Structure : UTE Indians A #26

Slot : slot #1

Location : SAN JUAN COUNTY, NEW MEXICO



INTEQ

