

34839218 NSL 1/2/01



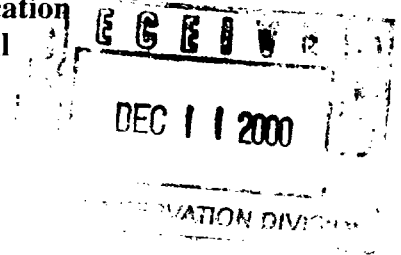
Cross Timbers Oil Company

December 11, 2000

Certified Mail # 0369 2538

Mr. Michael E. Stogner
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

**Re: Application for Administration Approval of Unorthodox Location
Cross Timbers Operating Company's Ute Indians A #33 Well
NE/4 of Sec. 3-T31N-R14W, (Unit A)
San Juan County, New Mexico**



Gentlemen:

Cross Timbers Operating Company hereby requests approval of the following unorthodox location:

Well Name:	Ute Indians A #33
Pool:	Ute Dome-Dakota Pool & Proposed Ute Dome-Morrison Pool
Location:	Surface: 200' FNL & 700' FEL Top of Dakota: 467' FNL & 789' FEL Top of Morrison: 500' FNL & 800' FEL Bottom Hole: 632' FNL & 844' FEL
Acreage Dedication:	NE/4 of Section 3, being 160.24 acres, more or less
County/State:	San Juan County, New Mexico
Pool Rules:	660' from outer boundary of quarter section line

Attached please find the following support and documentation for this application:

1. C-102 Plat;
2. Geologic/Geophysical Summary; and
3. Ownership map.

The NE/4 of Section 3 and all adjoining spacing units are 100% owned and operated by Cross Timbers Operating Company; therefore, there are no other offset operators or owners to notify.

The surface location of this well is unorthodox due to topographic reasons—the terrain is too rough so we are moving away from an exposed outcrop and toward an existing road.

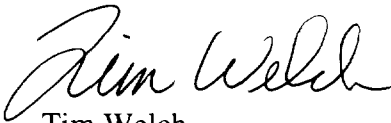
By certified mail, a copy of this application has been sent to the parties listed hereunder.

Thank you for your consideration in this matter and please call me at (817) 885-2661 if you have any questions

Ute Indians A #33 well
NMOCD
December 11, 2000
Page 2

Your consideration in this matter is appreciated.

Very truly yours,

A handwritten signature in black ink, appearing to read "Tim Welch". The signature is fluid and cursive, with the first name "Tim" being more prominent than the last name "Welch".

Tim Welch
Senior Landman
Cross Timbers Operating Company

Enclosures

Cc: Gordon Hammond
Ute Mountain Ute Tribe
P.O. Box 42
Towaoc, Colorado 81334

Certified Mail # 0369 2545

Dan Rabinowitz
Bureau of Land Management
15 Burnett Court
Durango, Colorado 81301-3647

Certified Mail # 0369 2552

Gerry Simon
Data Consultants Incorporated
P.O. Box 14749
Albuquerque, New Mexico 87191

Certified Mail # 0369 2569

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number	*Pool Code 86720	*Pool Name UTE DOME DAKOTA
*Property Code	*Property Name UTE INDIANS A	*Well Number 33
*GRID No. 167067	*Operator Name CROSS TIMBERS OPERATING COMPANY	*Elevation 5979'

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
A	3	31N	14W		200	NORTH	700	EAST	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
A	3	31N	14W		632	NORTH	844	EAST	SAN JUAN

¹² Dedicated Acres 160.24 NE 1/4	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <u>Jeff Patton</u> Printed Name <u>Jeff Patton</u> Title <u>Production Engineer</u> Date <u>12/7/00</u>
	¹⁸ SURVEYOR CERTIFICATION 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. REVISED: DECEMBER 6, 2000 AUGUST 23, 2000 Date of Survey Signature and Seal of Surveyor Certificate No. <u>6857</u>

UTE INDIANS "A" #33 GEOLOGIC/GEOPHYSICAL SUMMARY

The Ute Indians "A" #33 is a proposed 3,225' Ute Dome-Dakota/Ute Dome-Morrison test. The "A" #33 will be directionally drilled from a surface location of 200' FNL and 700' FEL of section 3-T31N-R14W, San Juan County, New Mexico. The top of the Dakota Formation will be encountered 467' FNL and 789' FEL at a well depth of ~~2,181'~~. The top of the Morrison Formation will be encountered 500' FNL and 800' FEL at a well depth of ~~2,182'~~. The bottom hole location will be 632' FNL and 844' FEL in the same section. There are currently no wells producing from the Ute Dome-Dakota Pool or the Ute Dome-Morrison Pool in this 160-acre unit comprised of the NE/4 of section 3.

The Ute Dome Field is located on a broad semi-circular structure on the southeastern edge of the Four Corners Platform. On the southeast side of the structure, the entire stratigraphic section dips steeply to the southeast into the San Juan Basin. The southern portion of the structure is bisected at the Dakota/Morrison level by numerous WNW-ESE trending normal faults. Vertical displacement along these faults can be as much as 250'. The faults commonly form four-way closures which trap hydrocarbons migrating upward from mature source rocks in the basin.

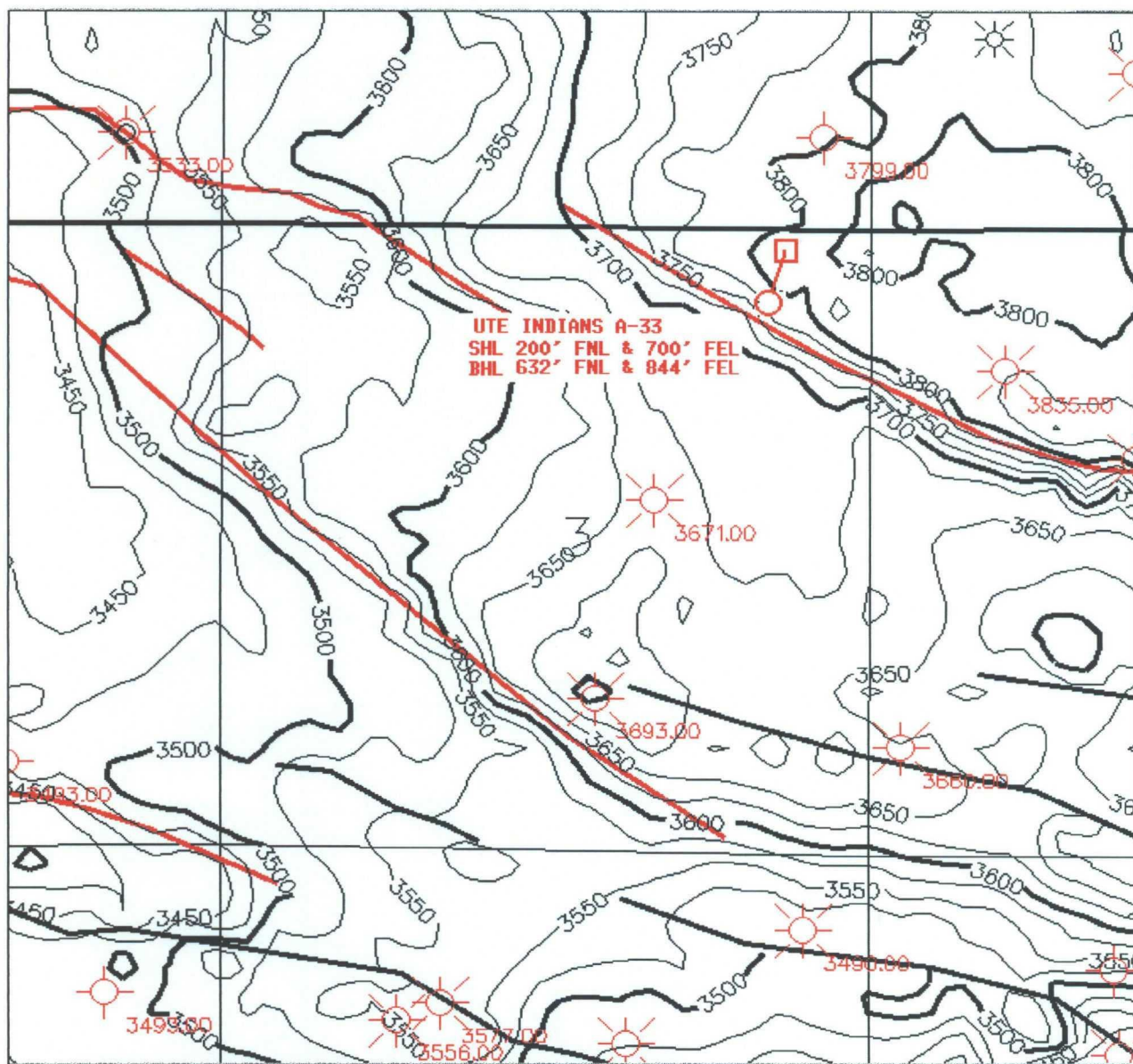
The attached seismic structure map on the top of the Dakota Formation was interpreted from a Vibroseis 3-D seismic survey shot by Amoco in 1995, and reprocessed by Cross Timbers in 1998. The top of the Morrison is approximately 210' below the top of the Dakota. The location for the proposed Ute Indians "A" #33 was chosen to test the Dakota and Morrison at the highest structural position in section 3, on the up-thrown side of a down-to-the-south fault. This WNW-ESE trending normal fault is productive on the up-thrown side in both the Dakota and Morrison in wells to the east in the NW/4 of section 2. Within section 3, the Ute Indians "A" #28 well in the W/2,SE/4, is productive in the Dakota and the Morrison. The "A" #28 well is situated between two faults on a small horst-like feature. The "A" #28 is up-thrown to the north and to the south. It is structurally lower than the proposed "A" #33 well, but hydrocarbons have been trapped along the faults due to structural closure.

An Unorthodox Location is requested for the Ute Dome-Dakota Pool and the Ute Dome-Morrison Pool. The requested location will allow Cross Timbers to test each of these Formations in a structurally higher position on the upside of a fault. A legal location in the NE/4 of section 3 would put the well on the down-thrown side of the fault, approximately 100' low to the requested location and in a much less favorable structural position. We will be moving closer to the north line, but no closer to any Dakota or Morrison production. The only well in the SE/4 of section 34-T32N-R14W was the Ute Indians "A" #24 well, an unsuccessful Dakota test drilled by Amoco Production Company.





Randall M. Hosey
Senior Geologist
Cross Timbers Oil Company

R 14 W



CONTOUR INTERVAL: 25 Feet

-  Down-to-North Fault
-  Down-to-South Fault



Cross Timbers Oil Company

UTE DOME FIELD
San Juan County, New Mexico

STRUCTURE: TOP OF DAKOTA
UTE INDIANS A-33

November, 2000

MSV



Ownership Map for all Formations

Ute Indians A-33 Well, NE/4 of Section 3, T-31-N,R-14-W

STATE: New Mexico COUNTY: San Juan

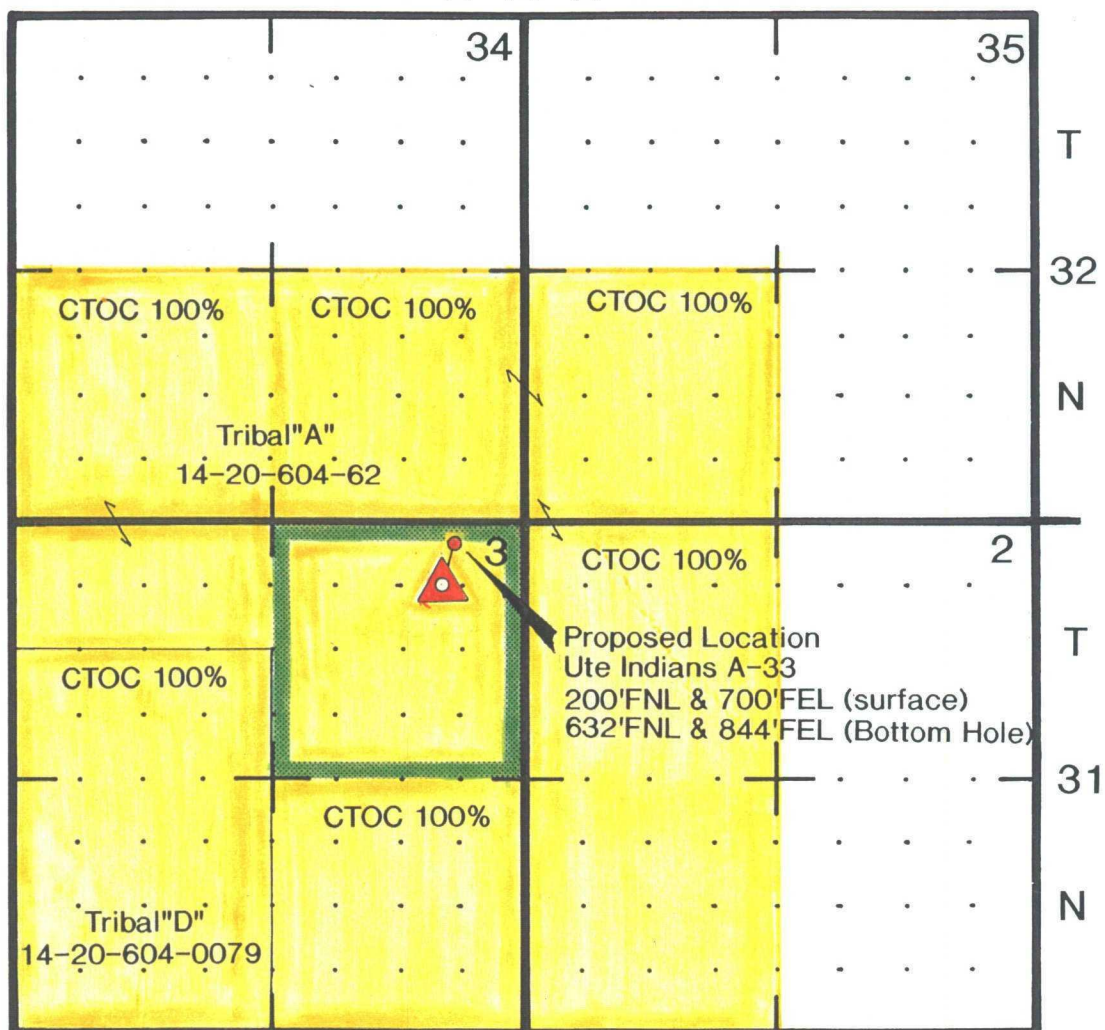
PROSPECT: NE/4=160Acres Gas Spacing And Proration Unit. DATE: 12/11/2000

SECTIONS: 3 BLOCK: _____ SURVEY: _____

ACRES: _____ TOWNSHIP: 31-N RANGE: 14-W

SCALE: 1"=2,000'

R-14-W



CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

01/31/01 13:38:52
OGOMES -TPIK
PAGE NO: 1

Sec : 03 Twp : 31N Rng : 14W Section Type : NORMAL

4 40.12 Indian owned	3 40.12 Indian owned	2 40.12 Indian owned	1 40.12 Indian owned A
E 40.00 Indian owned	F 40.00 Indian owned	G 40.00 Indian owned A	H 40.00 Indian owned

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

01/31/01 13:38:57
OGOMES -TPIK
PAGE NO: 2

Sec : 03 Twp : 31N Rng : 14W Section Type : NORMAL

L 40.00	K 40.00	J 40.00	I 40.00
Indian owned	Indian owned	Indian owned	Indian owned
M 40.00	N 40.00	O 40.00	P 40.00
Indian owned	Indian owned	Indian owned A	Indian owned

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD : ONGARD 01/31/01 13:39:23
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPIK

OGRID Idn : 167067 API Well No: 30 45 30490 APD Status(A/C/P): A
Opr Name, Addr: CROSS TIMBERS OPERATING COMPANY Aprvl/Cncl Date : 01-17-2001
2700 FARMINGTON AVENUE
BUILDING K, SUITE 1
FARMINGTON,NM 87401

Prop Idn: 22645 UTE INDIANS A Well No: 33

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----	-----
Surface Locn :	1	3	31N	14W			FTG 200 F N	FTG 700 F E
OCD U/L :	A		API County :	45				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): G Cable/Rotary (C/R) : F
Lease typ(F/S/P/N/J/U/I): U Ground Level Elevation : 5979

State Lease No: Multiple Comp (S/M/C) : S
Prpsd Depth : 3200 Prpsd Frmtn : UTE DOME DAKOTA

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD : ONGARD
OG6IWCM INQUIRE WELL COMPLETIONS

01/31/01 13:39:41
OGOMES -TPIK

API Well No : 30 45 20770 Eff Date : 01-01-1998 WC Status : A
Pool Idn : 86760 UTE DOME PARADOX (GAS)
OGRID Idn : 167067 CROSS TIMBERS OPERATING COMPANY
Prop Idn : 22790 MOUNTAIN UTE COM A

Well No : 001
GL Elevation: 6038

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: G	3	31N	14W	FTG 2270 F N	FTG 1700 F E	P

Lot Identifier:

Dedicated Acre: 640.00

Lease Type : U


Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

County San Juan Pool Ute Dome - Dakota

TOWNSHIP 31 North RANGE 14 West NEW MEXICO PRINCIPAL MERIDIAN

					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description: All Sec. 1 & 2 (R-13, 3-15-50)

Ext: All Sec 10 & 11 (R-4690, 12-1-73) Ext. ^{SE}/₄ Sec. 3 (R-11445, 9-5-00)

COUNTY *San Juan*POOL *Ute Dome - Dakota*TOWNSHIP *32 North*RANGE *13 West*

NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Ext: $\frac{SW}{4}$ Sec 30 (R-5339, 2-1-77) Ext: $\frac{N}{2} + \frac{SE}{4}$ Sec. 30 (R-6056, 8-1-79)

Ext: $\frac{N}{2}$ Sec 31 (R-7046, 8-6-82)

County San Juan Pool Ute Dome - Dakota

TOWNSHIP 32 North RANGE 14 West NEW MEXICO PRINCIPAL MERIDIAN

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description; All Sec. 35 & 36 (R-13, 3-15-50)

Ext: $E\frac{1}{2}$ Sec 25 (R-4690, 12-1-73) Ext: $S\frac{1}{2}$ Sec 24 (R-5779, 8-1-78)

Ext: $W\frac{1}{2}$ Sec. 25 (R-6327, 5-1-80) Ext: $SE\frac{1}{4}$ sec 26, $NE\frac{1}{4}$ sec 34,
(R-6886, 1-22-82)

COUNTY

San Juan

POOL

Ute Dome

Morrison

31 North

RANGE

14 West

NMPM

A 6x6 grid with numbers 1 through 36. The numbers are arranged in a boustrophedon pattern, starting from the top right and moving left, then alternating rows to move right. A pink square is located at the intersection of the 3rd row and 3rd column, which is the cell containing the number 3.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper.