

34839349 NSL 1/2/01

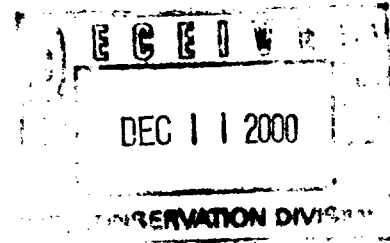


## Cross Timbers Oil Company

December 8, 2000

Certified Mail #4942 8849

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 Mountain Ute Gas Com N #2 Well  
Proposed Location: 2,500' FNL & 550' FEL of Sec. 10-T31N-R14W  
Unit H, SE/4 NE/4, San Juan County, New Mexico**

Gentlemen:

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

Well Name: Mountain Ute Gas Com N #2  
Pool: Ute Dome-Dakota Pool & Proposed Ute Dome-Morrison Pool  
Location: 2,500' FNL & 550' FEL of Section 10-T31N-R14W  
Acreage Dedication: NE/4 of Section 10, being 160 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 10 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. As a result, there are no adversely affected offset interest owners.

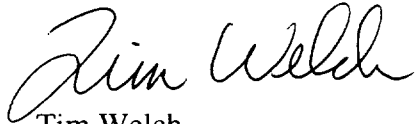
By certified mail, a copy of this application has been sent to the parties listed hereunder.

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

Mountain Ute Gas Com N #2 well  
NMOCD  
December 8, 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 # 4942 8863

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

Certified Mail # 4942 8870

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

Certified Mail # 4942 8856

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 MOUNTAIN UTE GAS COM N			*Well Number 2
*OGRIID No. 167067		*Operator Name CROSS TIMBERS OPERATING COMPANY			*Elevation 6283'

<sup>10</sup> Surface Location

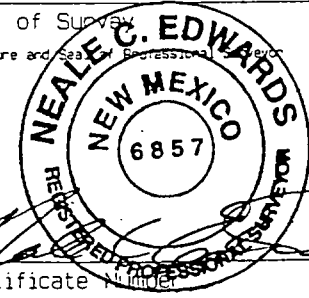
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	10	31N	14W		2500	NORTH	550	EAST	SAN JUAN

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres 160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

<sup>15</sup>	5282.64'				<sup>17</sup> 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>Production Engineer</u> Title <u>7/13/00</u> Date <u>7/13/00</u>
	2500'				
	550'				
5280.00'	10				<sup>18</sup> 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.  JUNE 23, 2000 Date of Survey Signature and Seal of Professional Surveyor  Certificate Number 6857
5281.32'					
5280.00'					

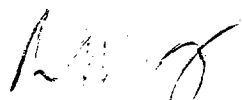
## **MOUNTAIN UTE GAS COM "N" #2 GEOLOGIC/GEOPHYSICAL SUMMARY**

The Mountain Ute Gas Com "N" #2 is a proposed 3,800' Ute Dome-Dakota/Ute Dome-Morrison test. The "N" #2 will be drilled at a surface location of 2,500' FNL and 550' FEL of section 10-T31N-R14W, San Juan County, New Mexico. The top of the Dakota Formation will be encountered at a well depth of 2,843'. The top of the Morrison Formation will be encountered at a well depth of 3,036'. 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 10.

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 200' below the top of the Dakota. The location for the proposed Mountain Ute Gas Com "N" #2 was chosen to test the Dakota and Morrison on the up-thrown side of a down-to-the-north fault. This WNW-ESE trending normal fault is productive on the up-thrown side in the Dakota to the west in the NW/4 of section 10. The seismic structure map shows almost 40' of closure against the fault at this location. Within section 10, four wells have been completed in the Dakota Formation and no Morrison production has been established in the section. Only two of the four Dakota producers are still producing. These wells are in the west half of section 10.

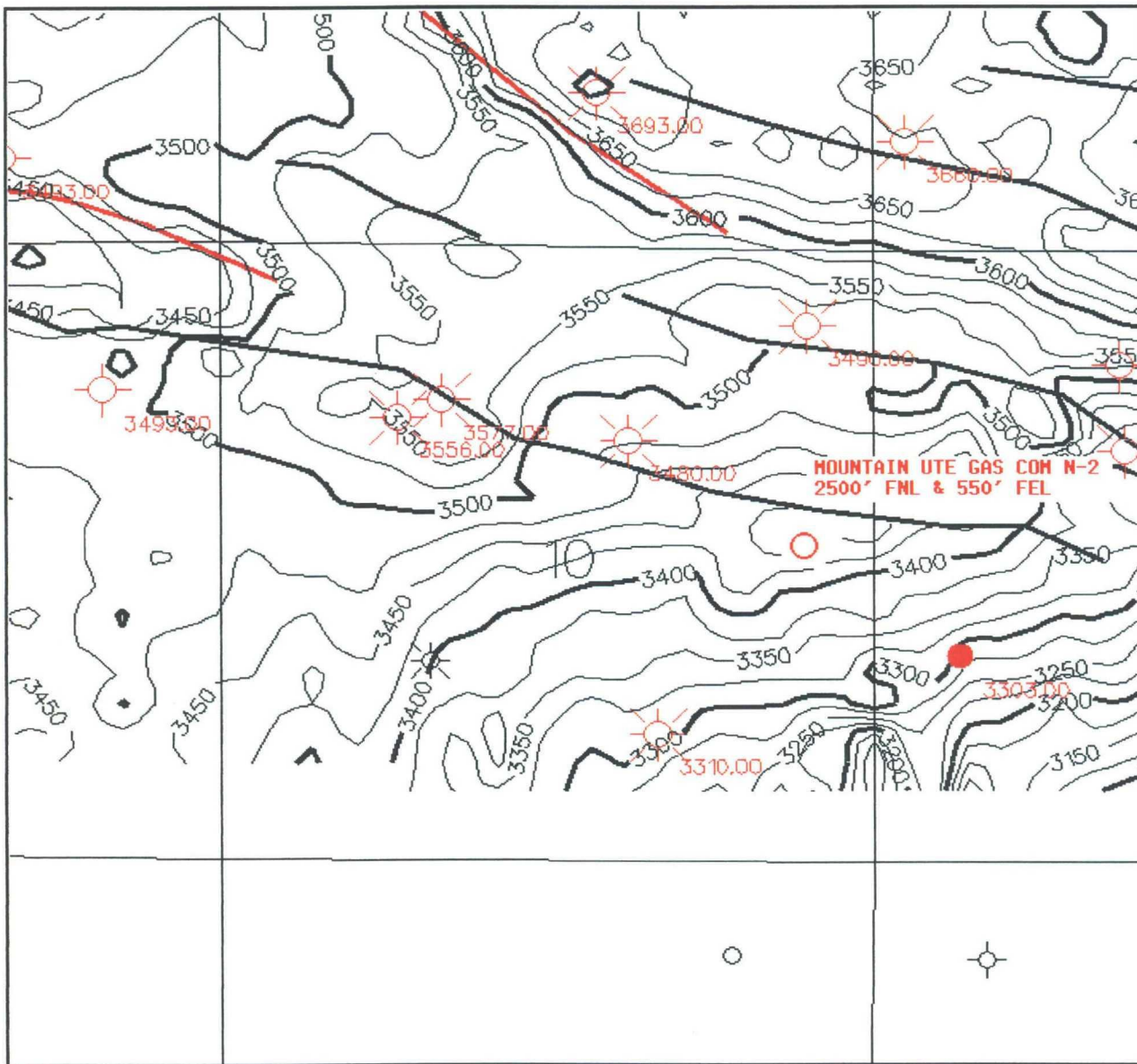
An Unorthodox Location is requested for the Ute Dome-Dakota Pool and the Ute Dome-Morrison Pool. The requested location will allow Cross Timbers to test each of these Formations along the upside of a fault with closure. A legal location in the NE/4 of section 10 would put the well on the down-thrown side of the fault, approximately 50' low to the requested location and in a much less favorable structural position. We will be moving closer to the south and east lines of the unit, but not closer to any current Dakota or Morrison production in section 10 and only 110' closer to a current Dakota producer in the SW/4 of section 11 to the east. The Ute Mountain Tribal "J" #2 well in the SW/4 of section 11 is operated by Cross Timbers.



Randall M. Hese  
Senior Geologist  
Cross Timbers Oil Company

R 14 W

T  
3  
1  
N



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



**Cross Timbers Oil Company**

UTE DOME FIELD  
San Juan County, New Mexico

STRUCTURE: TOP OF DAKOTA  
MOUNTAIN UTE GAS COM N-2

November, 2000

MSV



# Cross Timbers Oil Company

Ownership Map for all Formations

Mountain Ute Gas Com N#2 Well, NE/4 of Section 10, T-31-N, R-14-W

STATE: New Mexico

COUNTY: San Juan

PROSPECT: NE/4=160Acres Gas Spacing and Proration Unit DATE: 12/8/2000

SECTIONS: 10

BLOCK: \_\_\_\_\_

SURVEY: \_\_\_\_\_

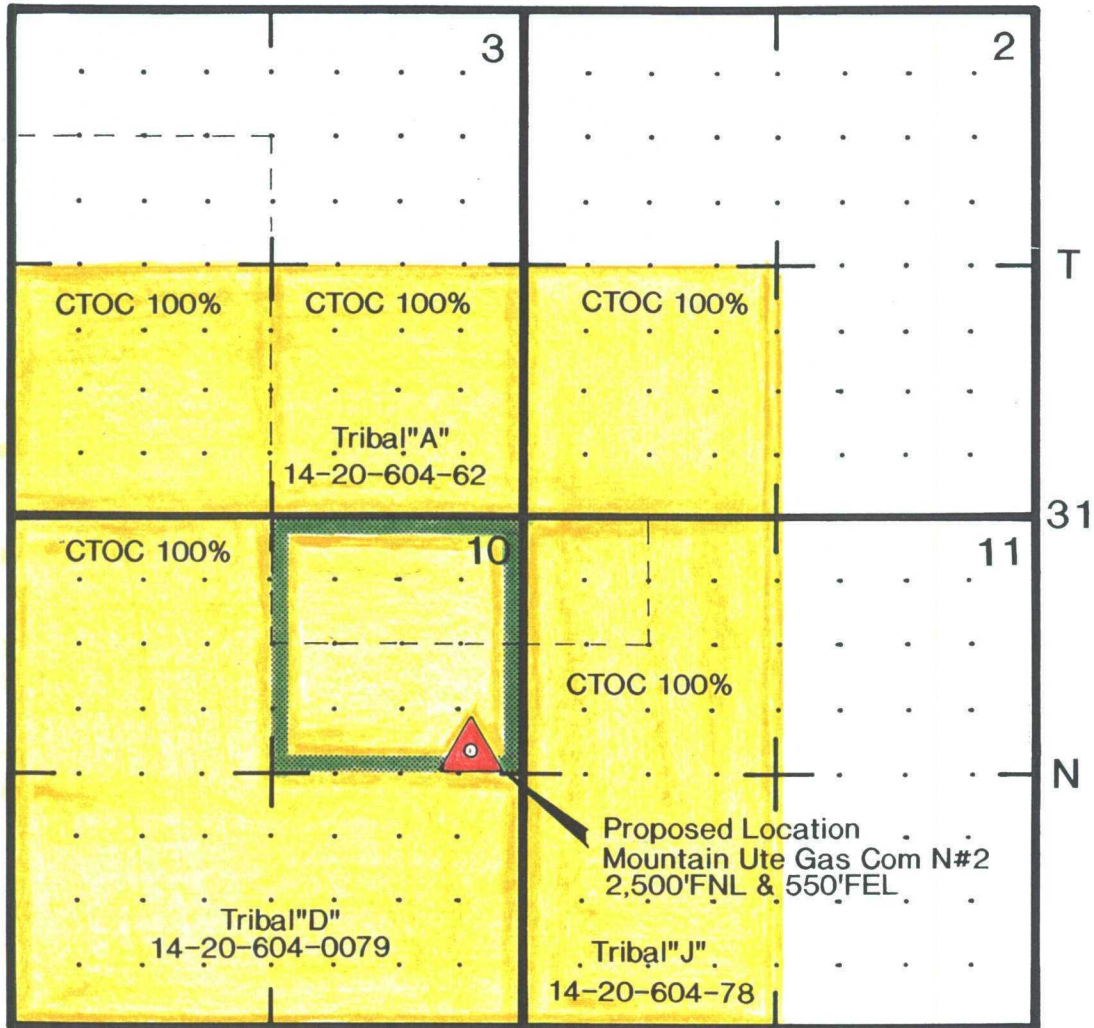
ACRES: \_\_\_\_\_

TOWNSHIP: 31-N

RANGE: 14-W

SCALE: 1"=2,000'

R-14-W



CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

01/31/01 09:39:47  
OGOMES -TPIK  
PAGE NO: 1

Sec : 10 Twp : 31N Rng : 14W Section Type : NORMAL

D 40.00	C 40.00	B 40.00	A 40.00
Indian owned	Indian owned	Indian owned	Indian owned
			A
E 40.00	F 40.00	G 40.00	H 40.00
Indian owned	Indian owned	Indian owned	Indian owned
	A A		A

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

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

01/31/01 09:39:52  
OGOMES -TPIK  
PAGE NO: 2

Sec : 10 Twp : 31N Rng : 14W Section Type : NORMAL

L 40.00  Indian owned	K 40.00  Indian owned  A	J 40.00  Indian owned	I 40.00  Indian owned
M 40.00  Indian owned	N 40.00  Indian owned	O 40.00  Indian owned  A	P 40.00  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 09:40:12  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPIK

OGRID Idn : 167067 API Well No: 30 45 30491 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: 24393 MOUNTAIN UTE GAS COM N Well No: 2

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
	---	---	-----	-----	-----		-----	-----
Surface Locn :	H	10	31N	14W			FTG 2500 F N	FTG 550 F E
OCD U/L :	H		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 : 6283

State Lease No: Multiple Comp (S/M/C) : S  
Prpsd Depth : 3800 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

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**From:** Hayden, Steven  
**Sent:** Monday, February 12, 2001 9:25 AM  
**To:** Stogner, Michael  
**Subject:** Ute Dome wells

Mike, I have no objection to the two Cross Timbers applications for non-standard locations for geological reasons:

Mountain Ute Gas Com N#2

Ute Indians A #33

Steve Hayden

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. <sup>SE</sup> 1/4 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:  $\frac{E}{2}$  Sec 25 (R-4690, 12-1-73) Ext:  $\frac{S}{2}$  Sec 24 (R-5779, 8-1-78)

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



COUNTY *San Juan* POOL *Ute Dome-Morrison*

TOWNSHIP *31 North* RANGE *14 West* NMFM

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



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