

NSL 12/9/98



Cross Timbers Oil Company

November 16, 1998

Bureau of Land Management
San Juan Resource Area
701 Camino Del Rio
Durango, Colorado 81301
Attention: Mr. Dan Rabinowitz

RECEIVED

NOV 19 1998

Re: Application for Unorthodox Location
Ute Dome Dakota Pool and Morrison Sandstone
Ute Indians A #28
SE/4 Section 3-31N-14W
San Juan County, New Mexico

Gentlemen:

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

Well Name:	Ute Indians A #28
Pool:	Ute Dome Dakota and Morrison Sandstone formation
Location:	1,300' FSL & 2,220' FEL
Acreage Dedication:	SE/4 Section 3-31N-14W, containing 160 acres, more or less
County/State:	San Juan County, New Mexico
Pool Rules:	790' from lease lines and quarter section lines

Attached is the following support and documentation for said application:

1. C-102 Plat
2. Geologic discussion
3. Copy of certified letter sent to offset operators/owners
 - A. Plat of offset operators
 - B. List of offset operators

We look forward to your approval and please call me at (817) 877-2336 with any questions.

Yours very truly,

Edwin S. Ryan, Jr.

cc: Lori Wrotenbery, Director
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

NMCOD - Aztec District Office
1000 Rio Brazos Road
Aztec, New Mexico 87410

Offset Operators

Gary Burch

Ute Mountain Ute Tribe
P.O. Box 248
Towaoc, Colorado 81334
Attention: Gordon Hammond

Bureau of Indian Affairs
Ute Mountain Ute Agency
P.O. Box KK
Towaoc, Colorado 81334

Bobby Smith - CTOC Midland

Barry Voigt

TRIGON SHEEHAN

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11/11 '98 17:12 NO.630 02

District I
PO Box 1980, Hobbs, NM 88241-1980State of New Mexico
Energy, Minerals & Natural Resources DepartmentForm C-102
Revised February 21, 1994District II
PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

PO Box 2088
Santa Fe, NM 87504-2088Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 CopiesDistrict III
1000 Rio Brazos Rd., Aztec, NM 87410District IV
PO Box 2088, Santa Fe, NM 87504-2088☐ 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 28
GRID No. 167067		Operator Name CROSS TIMBERS OPERATING COMPANY			Elevation 6038'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
0	3	31N	14W		1300	SOUTH	2220	EAST	SAN JUAN

21 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County

22 Dedicated Acres	23 Joint or Infill	24 Consolidation Code	25 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		5280.00'		17 OPERATOR CERTIFICATION	
4		3		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
2		1			
5283.96'		3		Signature Gary L. Markestad	
				Printed Name Vice-President / Production	
				Title	
				Date	
				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.	
				OCTOBER 15, 1998	
				Date of Survey	
				Signature and Seal of Professional Surveyor	
				NEALE C. EDWARDS NEW MEXICO 6857	
				Certificate No. 6857	
		5282.64'			
		1300'			
		2220'			

UTE INDIANS "A" #28 GEOLOGIC/GEOPHYSICAL SUMMARY

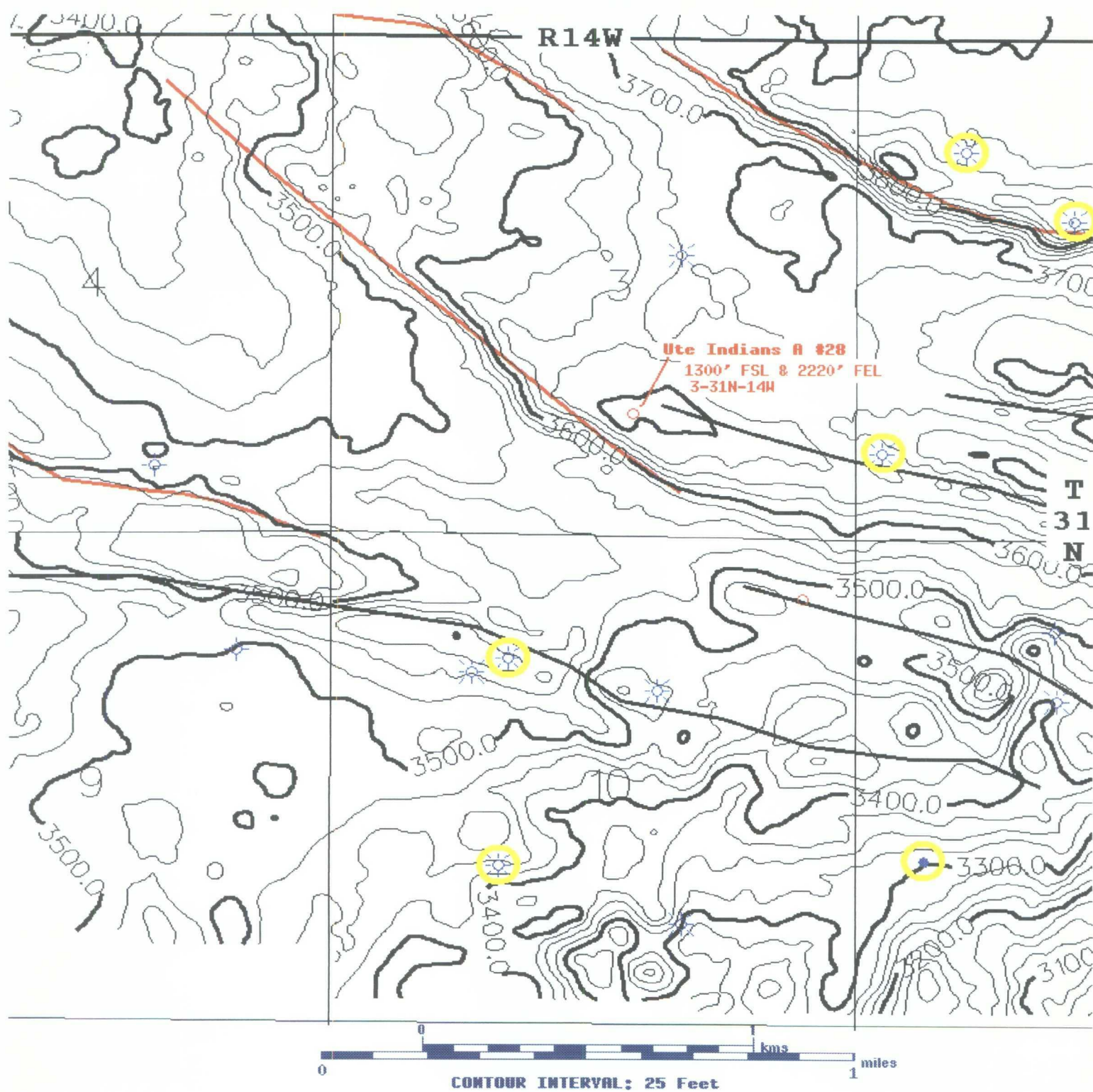
The Ute Indians "A" #28 is a proposed 2750 ft. Dakota/Morrison test to be located at approximately 1300' FSL, 2220' FEL of Sec. 3-T31N-R14W, San Juan County, New Mexico. There is currently no Dakota production in this section.




The Ute Dome Dakota Field is located on a broad semi-circular structure on the edge of the Four Corners Platform. On the southeast side of the structure the entire stratigraphic sections dips steeply to the southeast into the San Juan Basin. The southern portion of this structure is bisected at the Dakota level by several WNW-ESE trending normal faults. Vertical displacement along the faults can range up to 250 ft. The faults commonly form four-way structural closures which trap hydrocarbons migrating upward from mature source rocks in the basin.


The attached seismic structure map on the top of the Dakota Fm. was interpreted from a vibroseis 3-D seismic survey shot by Amoco in 1995, and reprocessed by Cross Timbers in 1998. The proposed Ute Indians "A" #28 is located on a small structural closure located between the northwestern terminus of a down-to-the-north normal fault and the southeastern terminus of a down-to-the-south normal fault. The closure is actually part of a larger fault-bounded structure which extends east-southeast into Sec. 2 and the northern part of Sec. 11. The fault-trapping mechanism on this feature has been proven by the completion of the Ute Indians "A" #25 well in the SW SW of Sec. 2 in a lower Dakota/Morrison sandstone which has been previously tested as water-bearing higher up on Ute Dome. Similarly, other Dakota sandstones which are normally wet have proven productive on the upthrown sides of other fault blocks in the field.

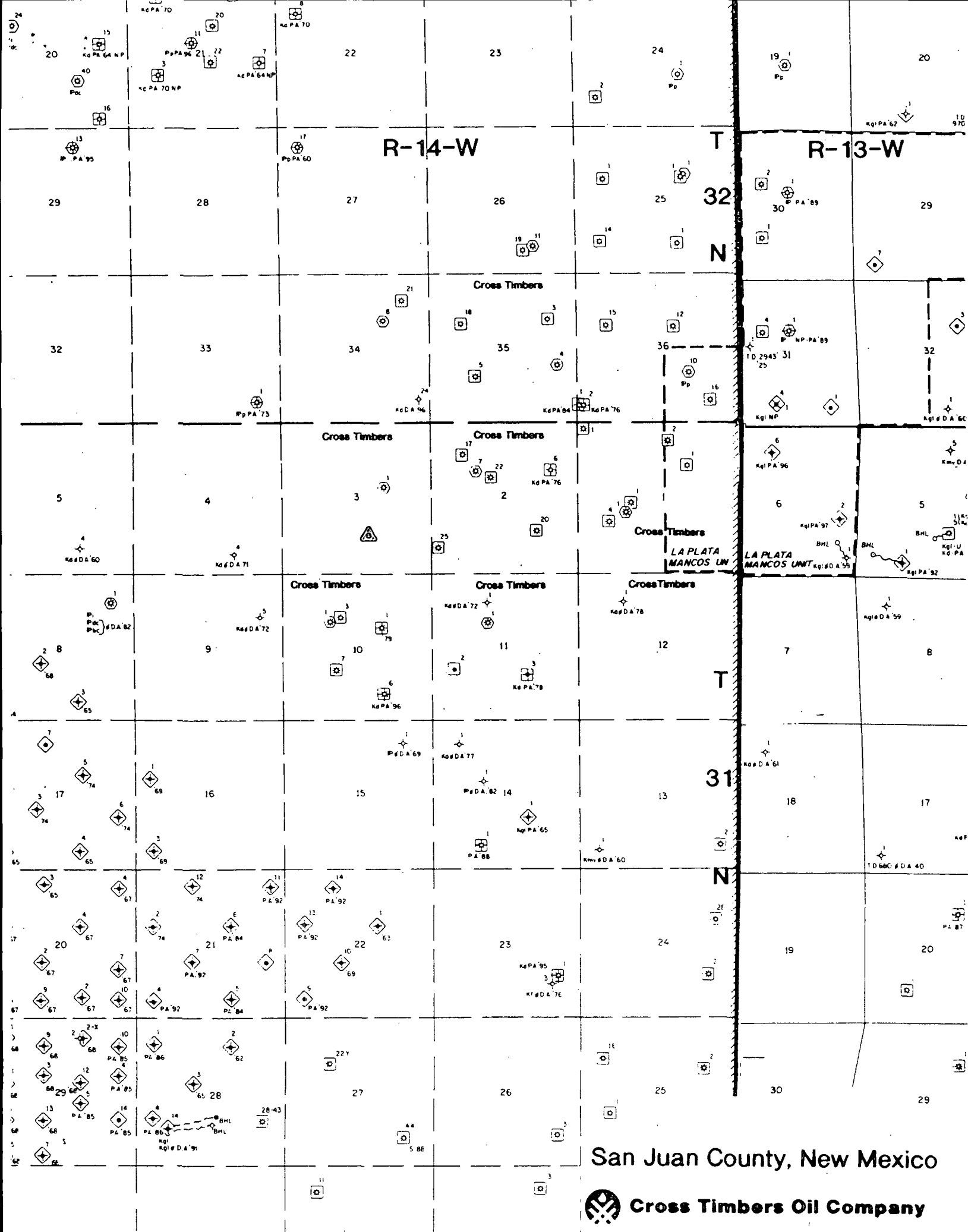
The placement of the proposed well in an unorthodox location is based on a combination of defining the highest structural point at the Dakota level from the seismic data and finding a topographically suitable spot where a location can be built relatively inexpensively and without unnecessary damage to the environment.

Gary K. Buech
Nov. 11, 1998



-  N
-  Down-to-North Fault
-  Down-to-South Fault
-  Active Dakota Producing Well

	Cross Timbers Oil Company
UTE DOME FIELD San Juan County, New Mexico	
STRUCTURE: Top of Dakota	
November, 1998	GKB/MSV



San Juan County, New Mexico



Cross Timbers Oil Company

OFFSET OPERATORS/OWNERS

Cross Timbers Oil Company, Applicant, is the only offset operator.

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)

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

11/23/98 13:30:39
OGOIV -EMF3
PAGE NO: 2

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

L 40.00 Indian owned	K 40.00 Indian owned	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	P 40.00 Indian owned

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